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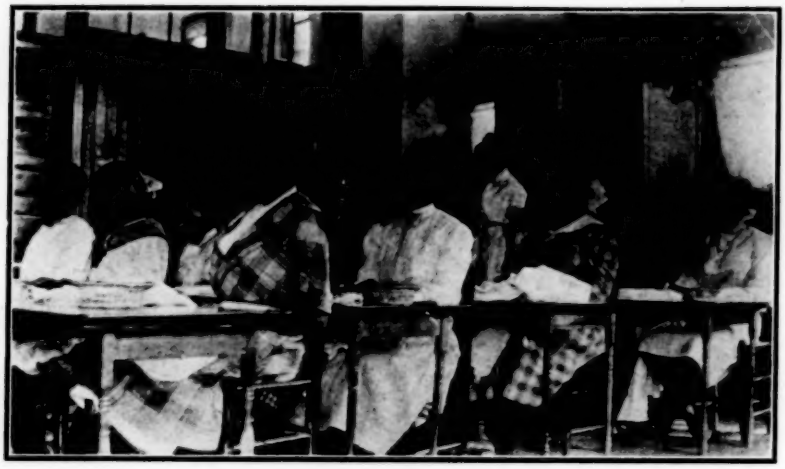

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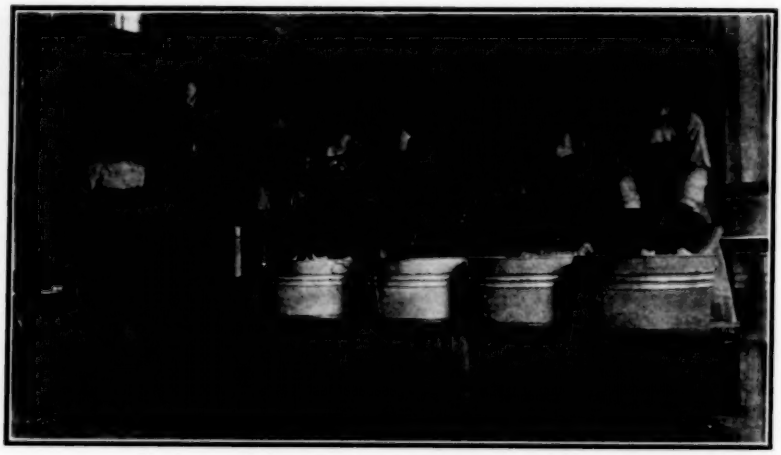

Class in Laundry Work.

Negro Industrial Training in the Public Schools of Augusta, Ga. (See opposite page.)

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NEGRO INDUSTRIAL TRAINING IN THE PUBLIC SCHOOLS OF AUGUSTA, GA.

ELIZABETH G. HOLT.

Supervisor.

For two reasons industrial training is strongly emphasized in our education of the negro youth in Augusta, approximately half their time in the two upper grades being devoted to it.

The first is that it may have an appreciable effect upon their habits of living. The original racial instincts of the negroes, and the poverty in which they have lived from the time that the support of the wealthy slave-owners was withdrawn, have caused the home life of the present-day negro to be utterly lacking in system, cleanliness, and comfort. Anyone who knows the squalor of the black belt that surrounds nearly every southern city, or the pathetic and primitive attempts to conceal with a few flowers and broken ornaments the extreme discomfort within the house, will bear witness to this statement.

The second reason is that it may enable them to render efficient service in the lines of work that they must necessarily follow in this section of the country under present conditions.

This industrial training is not being forced upon the negro. In fact it was first introduced into the white schools, and there the negro leaders in the educational life of the community, seeing the great advantage that it would be to their people, asked that they also might have it. In order to forestall any denial of their request by the Board of Education for financial reasons, they voluntarily offered to reduce the "book-learning" of the schools in order to use some of the regular grade teachers in the new Industrial Department.

Before this special training was undertaken the purely academic work was covered by an eight-grade course, almost identical with that given in the white schools. In modifying the course of study to make it respond to a demand for a more limited academic scope and an increased industrial one, we have been able to employ some of our former grade teachers as industrial teachers, thereby solving in part the problem of expense.

Through the remarkable devotion of these teachers to their cause, their eminently proper conception of its purpose, and their complete coöperation, it has been easily possible to train them specifically through the means of local normal classes supplemented by a helpful supervision of their teaching work, and through summer work at Hampton and Cheyney Institutes. It has been the custom of the Board of Education to make a certain appropriation each summer for Institute work with the negro grade teachers. Last year (1911) this appropriation was increased and used to send all the negro industrial teachers to summer training schools.

The work has been introduced into the four schools with enrollments sufficiently large to warrant the cost of equipment. The pupils in the two upper grades, the sixth and seventh, receive the instruction. These number per school about 60 girls and 15 boys.

In each school there are three sub-departments for the girls—cookery, laundry work, and sewing. Each sub-department has its own special teacher who devotes all her time to teaching the pupils of that particular building. This gives three Home Economics teachers to each building. The boys go to the central shop for their bench-work. All the departments are well equipped for individual work by twelve pupils per class.

Each girl receives per week approximately five hours instruction in cookery, four hours in sewing, and three hours in laundry work. A genuine interest on the part of the pupils is evidenced by their willingness to work over hours, at recesses or after school, when the occasion demands it.

Each boy receives per week one day's instruction in bench-work at the central shop known as the Second Ward Industrial School. It is the intention to introduce into this school in the course of time training in other trades.

Upon satisfactorily completing the work of the various departments the pupils are given certificates stating exactly the training that they have had. The names of those receiving the certificates are kept

on record, and so far as possible their future records as house-servants will be inquired into. By this plan of certification it is the purpose of our school system to supply the city with duly authorized and certified cooks, laundresses, and seamstresses. So far as we know, no other town or city has this plan so definitely worked out. If on the other hand they do not go into service, we propose to qualify them for keeping better homes of their own.

Following is a copy of the form of certificate given for cookery. Attached to each certificate is a statement of the exact work done by the particular pupil to whom it is given. This is necessary for the reason that the course of study is still in a progressive stage, changing and advancing from year to year.

Public Schools of Richmond County

DOMESTIC SCIENCE

.....*19*.....

This is to certify that.....
has satisfactorily completed the Course of Study in Domestic Science in the.....
..... *school.*

.....
Principal.

.....
Teacher.

Cookery Department.

In food preparation the foundation work is upon bread making. Considerable skill is acquired by means of repeated reviews and variations throughout the course. Training in all the typical forms of

cookery is given. The work is more elaborate and extensive than that in the white grade schools for the reason that in many instances these negro girls will obtain positions as cooks in well-to-do families, while the training in the white grade schools is limited to meet the average income.

Much stress is laid on the proper planning and serving of meals. In every lesson the correct manner of serving the particular dishes taught is included as a very important feature, while from time to time there is practice in laying the table and serving whole meals. The girls who come under this aesthetic influence at school will not only be capable of giving satisfaction to their future employers, but will also carry the influence of the ideal into their own homes.

We have a printed School Cook Book containing the recipes taught in the schools and others for home practice. In addition to practical manipulation, the training includes instruction in the scientific principles involved in the processes and as much about the materials as can come within the comprehension of the pupils.

Great emphasis is placed upon the formation of habits of cleanliness and order. This can be clearly seen in visiting one of these spotless school kitchens. Each pupil is taught the necessity of clean hands and personal neatness. No other work is allowed until the tables are scoured and immaculate, the stove and utensils shining and bright, and everything in perfect order. The equipment generally is in as good condition now as it was when first purchased three years ago. The neat young cooks always appear in white aprons and caps which they make in the sewing classes and keep clean and smooth in the laundry department.

As should be the case in all education the leading aim in this department and in the others is the development of proper character in the pupils. With these particular children stress is placed upon those things that make them more responsible and dependable. The moral effect has been remarkable.

Ordinarily the pupils work in groups of two, one bearing the main responsibility and the other assisting and observing. Each lesson is repeated at the following meeting of the class when the pupils exchange places. By this method two very important ends are accomplished, namely: (1) Concentration of attention and independence are developed, since the pupils must work entirely without the teacher's suggestions in the repetition lessons; (2) more nearly normal quantities of materials per individual can be used than would be pos-

sible by a greater division. Therefore a more normal manipulation is obtained.

Instruction in handling materials properly is very necessary. It is most important that all the experience of the school should enable the pupil to work practically in the home. Much of the criticism that has been made of domestic science courses throughout the country has been due to the fact that in order to keep the bills of the department at a minimum the pupils have been compelled to work with such small quantities of materials that they have been at a loss when undertaking to apply their knowledge at home under normal conditions. The pupils are here trained to modify the recipes to meet the needs of different sized families.

The supplies for the cooking lessons are paid for out of the school funds. The average cost per pupil per lesson throughout the course is five cents. Great care is taken in the purchasing of these materials. The pupils are taught the principles of economical buying and are trained in judgment in the selection of wholesome as well as attractive foods.

The cookery equipment is ample as to utensils; it includes all that should be in the modern well-furnished kitchen, and selected with judgment as to use, durability, cost, and appearance. Wood or coal stoves are used, but gas is to be introduced later on. There are substantial cabinets with sliding glass doors, a large work table with twelve drawers, and sliding bread-boards, six to a side, twelve stools, a sanitary sink, refrigerator, screened doors and windows, teacher's desk and chair, etc. The woodwork and walls are white. At the windows are white swiss half curtains, shades, and potted plants. Everything inspires happy efficient work and offers an ideal of a clean and attractive laboratory.

In this department, as well as in all the others, notebooks on the daily work are kept and the general interest is manifest from the care with which records are made by the pupils upon all points of instruction.

Sewing Department.

Up to the present the work in the sewing classes has been based upon plain hand and machine processes, the application being upon towels, caps, sewing and cooking aprons, curtains, table linen, ironing-board covers, etc., to be used in the schools, and upon complete personal outfits for the pupils themselves. The materials for school equipment

are paid for out of the school funds. The pupils themselves purchase the materials for the personal outfits.

In the planning and making of their own clothes they are led to exercise judgment and taste in the selection of materials and styles. Strong emphasis is placed upon accuracy, neatness, and economy of time and material.

The stitches are learned upon scraps of cloth. These are discarded as soon as sufficient skill is acquired for direct application upon the garment itself.

In the cutting of garments the pupils are taught the use of purchased patterns. Through this instruction they are trained in independence and economy, being required to study the printed directions and to reason out for themselves the proper placing of the patterns on the materials.

It is impossible to keep a class together in sewing work since individual capacities assert themselves strongly. However, periodically the pupils are marshalled into line and class instruction given. This must be followed up by considerable individual assistance.

In connection with the practical applications instruction is given in the history of the various implements used and the selection and care of different textiles, this latter point being further demonstrated in the laundry department and upon the hygiene of clothing.

Upon completing the course of work the girls are capable of clothing themselves properly and of keeping this clothing mended and in order. Through it they have a foundation of knowledge and skill whereby they can with experience become expert seamstresses and dressmakers.

The equipment in this department consists mainly of twelve individual cutting tables, one demonstration cutting table, twelve fully equipped sewing baskets, two sewing machines (more to be added later), ample cabinets for storing and displaying the work, two stationary lavatories, blackboards, demonstration frame, waste paper baskets, chairs, etc.

Considerable attention is paid to the general appearance and comfort of the rooms, the endeavor always being to place the pupils in wholesome, uplifting environments.

Laundry Department.

In the laundry department the necessary principles are impressed through a large and varied practice. In the beginning of the course

the work is upon the school equipment that has been made in the sewing classes; later in the year upon articles brought from home by the teachers and pupils.

Each new process is presented to the class through demonstration by the teacher. In connection with the processes she develops the principles and reasons involved. Thus the pupils are trained to work intelligently as well as skillfully. Following the demonstration the pupils work individually.

The certificates of proficiency given upon the completion of the work in this department mean that the holders are competent to do laundry work with a degree of skill far surpassing that of the average untrained washerwoman of the community. Every process has been worked out intelligently so that not only will the results of their work look better, but also from their correct methods the various fabrics will last longer.

The laundries are equipped for individual work by twelve pupils. There are two stationary tubs for general purposes and for carrying off waste water. The individual washing is done in ordinary galvanized iron tubs such as the pupils will use at home. These rest upon benches of convenient height having rollers that they may be easily moved to the stationary tubs to be filled with water by means of hose-pipes. There are twelve ironing boards which rest upon movable stands. Each board is furnished with a sufficient number of irons. In the general equipment there are a heater with a 40-gallon boiler, a stove for heating the irons, charcoal iron heaters for warm weather, vessels for boiling the clothes and making starch, tables for sprinkling, baskets, etc.

As the laundries are on the second floor a large uncovered platform has been built off from each for the purpose of drying the clothes.

Bench Work.

The boys of each school are assigned a certain day in the week for reporting at the second ward bench-work shop. Here they make articles for the schools and for their own homes. They are allowed to have the product of their work upon paying the cost of the raw materials.

The uses of the various tools are taught in direct application upon interesting problems. The pupils acquire skill much more readily and happily through this immediate appeal to their interest than they ever would through abstract drill.

All that has been said of the far-reaching effect of the industrial training upon the girls, could be repeated in regard to the boys. Under its influence they are developing into much more trustworthy and competent citizens.

The following quotation from a report of one of our negro school principals and leading negro citizens will show that the sentiments expressed in this article are in accord with those felt by our negro himself:

> The public school is the only training school which the vast majority of colored boys and girls will ever enter. It ought to need no argument, then, to show that the things that will best prepare them for life's struggles are the best things to teach them in the public schools.
>
> Why are children sent to school? For two reasons: First, to teach them to earn a living, and, secondly, to teach them to enjoy what they earn. The fundamental reason is, of course, the first. The second reason is a secondary consideration. Yet it is on this phase of education—the cultural side, so-called—that the emphasis has been placed in the past. Really, the cart has been placed in front of the horse. We have been teaching the children to enjoy what they earn and have been teaching them to earn—nothing!
>
> We now know better. We have seen our mistake and we have had the courage to turn around.
>
> To be sure, we believe in teaching the fundamentals in the literary department, but we are unalterably convinced by practical experience that attention must be given more and more to what has been called in some quarters 'the bread and butter side of education.'

From another:

> Since sewing and cooking have been introduced into our school the teachers of the school, together with the friends, both white and colored, have remarked that the pupils are neater and cleaner in their personal appearance and more orderly and obedient in their conduct. The general effect upon their morals has been marked. A number of their employers have testified that they are more helpful to them now than they were before the work was introduced. The children themselves are so interested that they are willing to work before and after the regular school hours.

The following is an instance of the appreciation that the negro parents have of the work. In one of the schools one of the pupils is the daughter of a family of negro farmers who live up the country and send this girl down to attend our public schools during the winter months when there is no work for her to do in the fields. This year they are allowing her to stay several weeks longer than heretofore in order that she may advance further with the industrial work.

The remarkable and gratifying progress of this department has been due to the earnest enthusiasm, untiring energies, and unfailing coöperation of all concerned.

We believe that the best friend to the southern negro is the southern white man who realizes his limitations, sympathizes with his needs, and deals with him fairly and wisely for his greatest good in the community in which he must continue to live. Such a one is the superintendent of these schools, and to him first and foremost is due credit for his wise selections and direction in all the development of the industrial training throughout the system.

THE TEACHING OF SANITARY CHEMISTRY IN A WOMAN'S COLLEGE.[1]

KATHARINE BLUNT.

Vassar College.

As advocates of certain practical courses in women's colleges you have heard often repeated the idea that college courses must be cultural or disciplinary rather than vocational. I wish to describe in this paper a course given at Vassar, which is markedly "disciplinary," but in which this quality depends in part at least upon the close connection of the subject matter with practical daily life. It helps supply that idol of the undergraduate, "general culture," and also opens her eyes to the necessity of applying the best of brain power and of knowledge to everyday questions. I have called it sanitary chemistry, for lack of a better name, or applications of chemistry to food and sanitation. It is offered as a second year's course in chemistry with three hours of class-room work and four of laboratory.

The subject matter of the course is the chemistry of food, water, and air, and their adulteration. We spend two-thirds of the time on food and the organic chemistry leading up to it, and, as it is impossible to present the chemistry of food intelligently without organic chemistry, all food discussion, both in class-room and laboratory, is preceded by that part of pure organic chemistry with which it is closely related. For example, we study simple esters before fats, giving structural formulas and equations. We discuss optical activity in as elementary a way as possible, in order to use the polariscope intelligently for our work with sugars. We even isolate one or two amino acids from proteins and discuss the structure of the protein molecule as a complex polypeptid. The course is by no means symmetrical from the point of view of the organic chemist, but the attempt is made to give enough of the pure organic chemistry to make the attitude toward the food chemistry scientific rather than empirical.

We also study individual typical foods as a whole—milk, meat, butter, flour, vinegar—their commercial preparation, their composi-

[1] Presented at the Washington Meeting of the American Home Economics Association, December, 1911.

tion, their nutritive value, their adulteration. The laboratory work here is partly qualitative, for example, the separation of the different components of milk; and partly quantitative, as the determination of the fat of milk, chocolate, and various other foods, the determination of the protein of a cereal breakfast food or flour by the Kjeldahl method, and the distinguishing between butter and oleomargarine by the Reichert-Meissl number as well as by the simple household tests.

In the class-room discussion considerable emphasis is laid on the question of food adulteration, and in the laboratory many tests, both qualitative and quantitative, are made for the common adulterants, for coloring matters, and for preservatives. The students are encouraged to bring in samples of food that they wish to test, either at intervals throughout the course when special groups of substances are being studied, or, with better effect, toward the end of the year, when they have acquired somewhat greater skill in manipulation.

A short time is spent in reading and discussions upon dietary questions, using in part Professor Sherman's Chemistry of Food and Nutrition. The students weigh their food for a meal and compute or determine its value.

The degree of accuracy possible in the laboratory work is restricted by the limited training of the students; but emphasis upon such accuracy as is within their powers is essential. It is sometimes advantageous to use the fine chemical balances, but in most of the work balances as rough as the ordinary horn pan affairs, weighing to hundredths of a gram, are entirely satisfactory, though occasionally quantities somewhat larger than generally required must be taken for analysis. Burettes are used and with some care; and an understanding of the meaning of standard solutions and the general principles of volumetric analysis is essential if the quantitative work is to be done intelligently. Such knowledge can easily be given when the need for it arises.

For our study of drinking water we are especially well situated at Vassar. The sources of water around us are considerably varied. Our main college supply in use in the dormitories comes from wells of excellent character, a second supply used only for the boiler and laundry is from a small stream, and much of the water of the houses near the college comes from shallower wells the water of which needs watching. The college employs an analyst who keeps track of the college supplies and those of the neighborhood. In our course the students make a study of the college water in connection with the general question of sanitary water supplies, performing the main processes of a

regular chemical water analysis in the laboratory of the analyst and under her direction, and comparing their results with hers for the same water, and also with hers for other waters of the neighborhood. Both the college waters and those of the neighborhood are of personal interest to the girls, as some of them have formerly lived "off campus" and used these outside supplies, or at least frequent tea-houses that use them. It is therefore an easy task for the instructor to encourage considerable reading and class-room discussion, and to make the students see the vital importance of proper water supplies.

Less time is spent on air than on the other parts of the course. We discuss the varying composition of the atmosphere, especially the quantity of carbon dioxid and water vapor, their significance, their determination, and their regulation by proper ventilation.

As a prerequisite for this sanitary chemistry we demand one year of college work in general chemistry. Ideally, for an adequate presentation of the subject matter, it would be a great advantage to have students who had had in addition at least qualitative and quantitative analysis and elementary organic chemistry. We have another course of somewhat similar subject matter for students with such preparation, but our aim in the course described above is not to train analysts but to make possible the understanding of the expert's analytical results as well as his conclusions, and to learn something of the possibilities and the limitations of chemical investigations along sanitary lines. In a word, we do not expect to train experts, but do hope to train students to an understanding of the significance of the work of the expert. We believe that the girl whose main interest is not scientific but who wishes to be intelligent on these important applications of chemistry should not be forced to take three years of specialized work before gaining this intelligence. This belief is in line with the tendency in some college departments to give brief courses for the general student as well as more detailed courses for those who specialize.

Our ideal is to have this sanitary chemistry one of several closely connected courses—bacteriology, especially of water, milk, and other foods, with a discussion of the questions of contagion and municipal disinfection; physiology, emphasizing nutrition and the effects of various diets; and sociology, including the general civic and legal aspects of the pure food, water, and air campaign and in general the larger questions of public health. Such a program of work would be somewhat similar in scope to the courses in training for public health

officials given at some of the larger universities. As an undergraduate course it would be more elementary and less thorough, but much of the ground covered would be the same.

So much for the general scope of the course. To what classes of girls do we consider it of value, and what do we hope it will do for them? We believe that it should be of value to virtually all college students—to the young women who will live a domestic life; to those who will go into social work of any kind, since there sanitary problems are of constant and pressing importance, be the work that of friendly visitor or member of a hospital board; to those who expect to teach and who will come upon cases of improper living conditions among their pupils that a little knowledge might alleviate; to those who may go on with further study in the same line to become public health officials; and in general to all those young women who wish to be intelligent on a public question of almost unequaled importance and who wish to gain the increased culture that comes from opening the mind to the bearing of science on establishing wholesome living conditions. A remark of Mrs. Huddleston's[2] gives well our belief in the value of this sanitary chemistry to the general student, although it does not mention the subject specifically.

> Without some acquaintance with biology, with bacteriology, with psychology, a man or woman is today almost as much cut off from the great currents of civilized thought and of righteous concerted action as persons unable to read and write have been for centuries past. Knowledge so fundamental, once assimilated, alters the whole intellectual and ethical attitude.

What may be the value of the course to these students has in part been already implied. First, it should give them some practical knowledge that will help them to be efficient public-spirited citizens, not led astray by extravagant statements but ready to initiate or give loyal support to sane work. Second, it should imbue them thoroughly with the idea that expert knowledge is needed in work that has to do with sanitary questions. As Dean Talbot[3] says: "Society expects women to be 'casual' in their interests and work." This training should help to lessen that tendency and lead the students to feel that this is "an age whose every task," to quote Woodrow Wilson,[4] "is conditioned upon some intelligent and effective use of the mind, upon some substantial knowledge, some special insight, some trained capacity,

[2] M. P. Huddleston, Pub. Assoc. of Collegiate Alumnae, ser. iii, no. 21, p. 36.
[3] Marion Talbot, The Education of Women, Univ. of Chicago Press, 1910.
[4] Woodrow Wilson, *Scrib. Mag.*, vol. xlvi, p. 576.

some penetration which comes from study, not from natural readiness or mere practical experience."

And third, the course should have marked disciplinary value. It is sufficiently hard to give good training purely in overcoming mental difficulties. It should have the additional value that comes from all properly managed laboratory courses—development of resourcefulness, self-reliance, coördination of mind and hand, power of reasoning from concrete observations. As its characteristic and especially valuable discipline, it should make the students feel that the scientific attitude is necessary in daily life, that the whys and wherefores of the little things and the big things should be explained and related. It should develop an intellectual curiosity about things as opposed to ideas. As children women seldom form the questioning habit about things around them as men do. A small girl, unlike a small boy, does not ask questions of the bricklayer or the street paver or the plumber; some of the girls whom we have at college have not even asked questions of the cook. A course such as this gives them the best possible discipline in this direction. There is nothing essentially feminine about it, to be sure. I speak of it as a question in the education of young women because I teach young women and because there is no doubt that they do need such training. From it they get a little below the surface of a subject whose importance is obvious to them, and they gain an impulse toward investigating the material things of life, a desire to explain what they see. There is much less danger of the good college student's missing the intellectual joy that comes from the study of books, than of her missing the joy that comes from understanding things. She can usually reason from what she reads better than from what she sees, from ideas better than from facts.

To sum up, we believe such a course in sanitary chemistry should be of benefit to college students, because it should give, first, certain significant information necessary for general culture and for efficient service; second, a sense of the importance of expert knowledge; and third, a valuable discipline arising from its difficulty, its laboratory method, and its training in applying the scientific attitude to questions of daily life.

To quote Dean Talbot[5] again: "The right education gives women not only specific knowledge, but vigor and breadth of view, discipline of character, and a freedom of mind which comes from the scientific attitude."

[5] Talbot, *loc. cit.*, p. 31.

MARKETING FACILITIES AND THEIR RELATION TO THE COST OF LIVING.[1]

EDWARD EWING PRATT.

New York Food Investigating Commission.

There are two fundamental theses of this paper. The first is that the supplying of food is one of the most important public services in any community. The provision and regulation, therefore, of marketing facilities are as important as the safeguarding and supervising of the community's transportation, gas, electricity, or water.

The second is that the present method of supplying the community with food is unsystematized and wasteful. The difficulties, however, of marketing foodstuffs are not due to the manipulation of any group of men, but rather to the faulty method of marketing which exists at present.

To the consumer, who may be only a casual observer of economic conditions, the present methods of marketing food supplies do not seem to be economical. He wonders oftentimes why there must be a store in every block, each one doing a very small business; he wonders why the eggs which he eats for breakfast must pass through four or five different dealers on their way to market, with each dealer meaning a loss of time, a profit, and expensive handling; his farmer friend tells him that farm produce brings almost nothing, and yet he knows that he is charged seemingly exorbitant prices at city markets; he sometimes wonders if he is paying for the expensive delivery system that is maintained by the retail stores; he wonders if he is paying for the groceries which his neighbor got on credit and did not pay for; he wonders if he is paying for any of the advertising when he eats his breakfast food. These are some of the questions which the consumer has been asking himself, and the lack of any satisfactory answer has made him alert to the situation and, perhaps, somewhat querulous.

Of all the expenditures of a community, the expenditure for food is greater than that for any other item. There was a time when the community recognized that the supplying of food was a public utility.

[1] Presented at the Lake Placid Meeting of the Administration Section of the American Home Economics Association, June, 1912.

This view seems to prevail no longer, and our food supplies are today almost unregulated, and have been given over to individual and private management. The result is often wasteful and inefficient methods of distribution. Other branches of our public services are carefully safeguarded and regulated by the municipal, state and federal governments, but the food supply is largely unregulated and almost chaotic.

From the early days of the village of New Amsterdam, there have been public markets in the city of New York. The farmers of Greenwich Village used to bring their vegetables into New Amsterdam, and to sell them along the water-front where the city had definitely limited the location of markets in which the sale of food supplies was permitted. As the city grew, market houses were needed. These were usually established where the people in the immediate neighborhood were willing to build the market house, which was then turned over to the city for operation. In the early part of the nineteenth century, the restrictions prohibiting the sale of food products by private marketmen began to break down, and markets not under the supervision of the city sprang up in various parts of New York. From this time on, the public markets fell more and more into disuse, and failed utterly to keep up with the growing and changing population.

At present, there are in New York City only two strictly retail markets—the Washington and Jefferson Markets. In addition, there are the public wholesale markets, known as the West Washington, Gansevoort, Wallabout, and Fulton (which does a small retail business).

In the case of these markets, the city of New York merely acts as a landlord; the city provides the building, and rents out the stalls to retail dealers. There is considerable vacant space in both of the retail markets, and as a result they are a source of loss to the city. As a matter of fact, the city loses about $80,000 yearly in the conduct of its markets.

New York City today has no definite market policy. It provides neither adequate wholesale nor adequate retail marketing facilities. The city does not even provide adequate terminal facilities for its food supplies. There is a crying need for some sort of regulation of markets and for the provision of marketing facilities in the city of New York.

Food supplies, shipped to New York City from all over the country and the world, are brought into Manhattan, and most of them are discharged along the Hudson River below Twenty-third Street. It is quite natural that this part of Manhattan has been chosen as the chief

terminal for New York City. The physical limitations of the port of New York City have largely determined it. Staten Island and Long Island are without any direct connection with the mainland. The low and somewhat marshy shores of New Jersey, with a high bluff immediately behind them, were poor locations for steamship piers or railroad terminals, and only within recent years have they been used to any extent. Manhattan Island with its rocky and almost precipitous banks formed a model location for piers and docks. On the other hand, however, there are only two freight-carrying railroads which enter New York, namely, the New York Central and the New York, New Haven, and Hartford. All the other railroads, which bring in the aggregate the largest amount of food supplies, are without direct terminal facilities, and it is necessary, therefore, for them to lighter all their freight which enters New York City. Most of the food supplies of the city are moved in the early hours of the morning, and the produce is sold, much of it on the docks and at the terminals, before 7 or 8 o'clock in the morning.

Food products are usually consigned by the producers to commission men who act as the receivers; they in turn sell to jobbers. A commission man usually specializes on a particular kind or line of goods. The jobber on the other hand brings together many lines of goods. He usually buys a special grade which he needs for his particular class of trade. The jobber sells to the retailer; although in many cases, another jobber intervenes—in New York he is the dealer, who has his place of business at the Harlem Market or in Attorney Street on the lower east side. By the time the retailer receives these goods, they have passed through at least four hands in New York City—transportation agencies, the wholesaler, the jobber, and the retailer.

There is no better example of this complicated process than the way in which eggs are usually marketed. The producer or the farmer is usually very haphazard in his methods. He collects the eggs at odd times and more often not until he is ready to go to town. He then gets together all the eggs that he can find, and takes them to the country storekeeper. The storekeeper usually pays him not in cash but in trade. The storekeeper in turn sells the eggs to collectors who go through the country gathering eggs from farmers and country storekeepers. The collector packs and grades the eggs and ships them in carload quantities to the New York market. Here they are received by a wholesale receiver who calls himself a commission man, although

he may or may not be doing a strictly commission business. The usual practice among commission men is to sell the eggs in as large quantities as possible to a jobber. The commission man then returns the amount realized, less a commission which is usually about 5 per cent.

Very often the price at which the sale is made is left to be determined by the market quotations as printed in the daily market publication known as the *Price Current*. The *Price Current* is compiled from figures obtained by reporters who canvass the wholesale district collecting the prices of commodities. The printed quotations may or may not represent the market, at most it succeeds only as well as the reporter succeeds in gauging it. The jobber, who buys from the commission man, either sells his eggs to a retailer or to another jobber who does business on a smaller scale. They in turn sell to the small retailers from whom the bulk of the population buy their eggs. When the eggs have finally reached the hands of the consumer, they have passed from the producer to the country storekeeper; from the country storekeeper to the collector; from the collector to the transportation agencies; from the transportation agencies to the commission agent or wholesale receiver; from the wholesale receiver to the large jobber; from the large jobber to the small jobber; from the small jobber to the retailer; and finally to the consumer. At each stage in the process, there are expenses for handling, for trucking, for storage, and a margin of profit. All of these charges are summed up in the price which the consumer pays, of which usually not more than 60 per cent and sometimes much less than this, goes to the original producer. Similarly complicated and round-about processes of marketing are to be found in almost every line of food supplies. Essentially the same thing is true of green vegetables, butter, cheese, canned goods, fish, poultry, milk, and many of the staple groceries. In certain lines, however, modifications have been made; for example in the marketing of western fruits and meat products.

Much of the western fruit sold is marketed through coöperative organizations of producers. The orange growers of California and the apple growers of Colorado, Oregon, and Washington have organized in order to eliminate as far as possible the middleman's expenses, to regulate the supply of fruit which may be sent to any given market, and to equalize the supply between seasons of scant and flush production. They have been eminently successful, and much over half of the entire supply of oranges from California is now marketed through

one organization. As a result, the prices on oranges are steadier throughout the year, and the producer through his coöperative organization becomes a direct marketer of his products.

In the marketing of meat, a similar change has taken place. In this case, of course, a manufacturing process, namely, the slaughtering, intervenes between the producer and the consumer. What has happened in this industry is that all steps in the process between the producer and the retailer have been centralized under one management from which undoubted economies accrue. However, the form of organization, instead of benefiting either the producer or the consumer, has become a monopolistic abuse, and probably an additional cause for dissatisfaction rather than any solution of the problem.

By one other method is the producer reaching the consumer more directly than the ordinary course of marketing; this is through the development of the package trade, which is becoming more and more important. By means of the package with a distinct label, the manufacturer is able to reach the consumer direct without the intervention of the middleman. Offsetting this gain, however, is the tremendous advertising expense, which it is not too much to say far outweighs the expenses and profits of the middleman. As a matter of fact, goods of exactly the same grade as those ordinarily put up in well-known packages, are sold in bulk at a very much lower price. A good example of this is flour. A quality of flour, exactly similar to that sold under a well-known name, may be purchased at from 85 cents to $1 less on the barrel—and this does not mean that the flour must be bought in barrel quantities. It is, of course, reasonable that this should be the case because the expense of advertising is a tremendous one.

The fault which I have to find with our present system of marketing is not especially due to the rapacity or dishonesty of any group of men. There is no one group of distributors, even of food products, which is getting particularly rich at the expense of the consumer. The difficulty with the present system is simply that it is an obsolete, uneconomical, and wasteful arrangement of facilities for marketing food products. The middleman himself is as much a victim of the system as is the consumer.

The general high level of prices, of which we read much in the public prints and of which we hear so much discussion, is due in the last analysis to certain fundamental causes, chief among which is the increase in the supply of gold—the cheapening of our medium of exchange. If the monetary unit in which all values are measured decreases, then

the other side of the equation, namely, the price of commodities, must increase. Therefore, we find that prices are rising rapidly not only in the United States, but also throughout the entire world.

Among the various groups of commodities, however, food prices have risen more rapidly than the prices of many other groups of commodities. For instance the prices of food products have increased more rapidly than the prices of clothing, metals, fuel, etc. This is due in a large part to the fact that the food producing areas of this country have been greatly reduced, and that population has been rapidly increasing. The trucking areas about our large cities have been curtailed, and have been filled by a rapidly enlarging urban population which is pushing out into the suburbs with its homes. The farms which were formerly used for the production of staple food products are being converted into truck gardens. The grazing areas of the west, which have been used for the raising of cattle, are being converted into farms for the production of our staple agricultural products. Cattle raising has been pushed into the least fertile regions, and much of the industry has been forced entirely out of the country. The margin of production is being forced further and further from the fertile lands, and less and less fertile lands with higher costs of production have taken their place. Our tariff wall has also prevented the free entrance of food products—not so much on account of duties leveled directly against them as on account of the fact that the whole course of international trade has not been able to develop freely on account of our tariff wall.

A remedy for high prices will probably never be found in this country. For any considerable period of time, we may look forward to a period of continued high prices. This is especially true of food products, because it will be increasingly difficult for our agriculture to keep pace with a rapidly increasing population. This fact should make, and is making, us more careful about our methods of doing business and should lead us to eliminate as much waste and inefficiency in our methods of production and marketing as is possible.

Greater efficiency in marketing and production may be obtained, first, through intensive agriculture, and secondly, through simplified and systematized methods of marketing. In case of the latter, the essential object to be attained is the bringing of the producer closer to the consumer by eliminating as many of the intermediate steps and intermediate expenses as possible. The way in which the producer may be brought closer to the consumer is not to be found in any one

method or in any one improvement. This end can be accomplished only by a general and comprehensive plan of improvement. Some suggestions based on experience here and abroad, may however be made, which will show how some of the intermediate steps in marketing may be eliminated.

(1) For the producer one of the most hopeful developments in recent years has been that of coöperative marketing. I have already mentioned the success which has attended the efforts of the fruit growers of the west. Coöperative marketing by producers will do away not only with the middleman, but with much of the poor grading, careless packing, and wrong handling of products, which are so prevalent today. The essential functions of a producers' distributive organization are (a) to bring the products as directly to the market as possible; (b) to encourage the best methods of production; (c) to handle and pack the products as carefully and as scientifically as possible; (d) to grade products at their point of production rather than to have this done by an intermediate agent; (e) to stand for and to be responsible for a certain grade or a certain line of products; and (f) where necessary to act as a credit organization, to furnish credit to the members of the organization where needed.

(2) Doubtless one of the most expensive features in the process of marketing food produce, especially in our large cities (and nowhere is this so evident as in New York City), is the arrangement or rather the lack of arrangement of terminal facilities. In New York City for example, we find goods being brought into the city, oftentimes directly through the great and growing population of the Bronx, down to the lower West Side. Here the wholesale market is located and the great bulk of the food products for New York City is unloaded. Food destined for Harlem and the Bronx must then be carted from six to twelve miles. Carting is a very expensive item in New York City, on account of the congested condition of the streets and the heavy fixed expenses incident to a large city. With a more economical arrangement of terminals or with some sort of transportation facilities for wholesale food products, perhaps a marginal railroad, and with the establishment of wholesale markets, at least in the various boroughs, a large part of this trucking expense could be eliminated.

(3) Retail organization might also be somewhat affected by certain changes in the methods of doing business. No one who has visited England can have failed to observe the success of the coöperative retail distributive organizations there. A large part of the popu-

lation are members of these organizations, and are thus able to save a considerable portion of the prices which obtain in the private retail stores. The coöperative retail organizations are not always able to buy singly from manufacturers and producers, but in the true spirit of coöperation they are able to coöperate one with another and to buy their supplies in large quantities direct from the producer and the manufacturer.

The real function of public markets is the bringing together as closely as possible the producer and consumer. In New York City this function has entirely disappeared, and the city has become merely a landlord, from whom the retail stall owner rents his place of business. A municipal market, with a real market function, would receive the products direct from the farmer or producer and sell them by municipal agency direct to the consumer on a commission basis. A municipal market would doubtless be able to gain a trade sufficient to dispose of all qualities of goods and it would then be possible for a producer to send his products direct to the municipal market and have them sold at retail where he would be able to obtain the highest price possible.

Another method of affecting the retail distribution of food supplies is the organization of a semi-philanthropic retail company with limited dividends. Such a company would act as a check on high prices by means of competition, and with a sufficiently large organization, which might very well be in the form of a chain of large retail markets handling a varied line of food supplies, would be able to buy direct from the producer or manufacturer. With limited dividends and with public statements of earnings and prices, the consumer would have confidence in such an agency and would be able to check any extraordinary or unwarranted rise of prices.

(4) There are other minor suggestions which would tend to simplify the processes of marketing. The setting up of standard grades for canned goods, flour, and various package commodities would enable the housewife to buy goods of a given quality no matter under what label or brand, or no matter how extensively advertised they might be.

The publication of wholesale prices of food commodities would doubtless do much to restrict the high prices of the retailer. It would enable the consumer to find out exactly what are the wholesale costs of goods laid down in New York. The publication of wholesale prices is one of the explanations as to why such staples as sugar and flour are sold on such a narrow margin.

If the supplying of a community with its food supplies is a public utility, and if that service is now being rendered in a wasteful and inefficient method under private management and control, it is a pertinent question why should not the municipality or the state step in with some sort of regulation. At least a publication at specified times of the prices of foods will enable the consumer to get a correct and comprehensive idea of exactly what is going on. The problem is not one that can be handled without careful study or by persons unfamiliar with the difficulties and complexities of the situation. On the other hand, it is a problem which needs a careful, all-round treatment, and should not be attacked piecemeal, but only with a comprehensive plan of future development.

THE LAUNDRY PROBLEM IN NEW YORK CITY.[1]

HELEN WOODFORD PRATT.

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It is a well known fact that as our civilization grows more complex, as industry and enterprise are more and more taking people away from their homes, the work of maintaining the home must be lessened, not only because the housewife has often not the amount of time she used to have, but because she has not the space and proper facilities for carrying on all processes that were at one time her chief occupation. This will account to us for the fact that there are approximately 6000 hand laundries and 250 steam laundries in the city of New York. These laundries could not remain in existence had they not enough trade to keep them busy and justify their continuance. The important thing at the present moment is to make the housewife realize that she is as responsible for the conditions under which her "wash" is done in these factory laundries as if that laundry were being done in her own home. It is the very ignorance of most women on this subject that makes the situation so acute, for if they would investigate the conditions under which much of their personal and household linen is washed they would realize not only the extent of the menace to the public health because of the unsanitary conditions, but they would also see how many men and women in the trade suffer because of the unorganized and chaotic state it is in at present.

[1] Presented at the Lake Placid Meeting of the Administration Section of the American Home Economics Association, June, 1912.

From our point of view the strike of the laundry workers last winter was of immense value because it brought before the public a vast number of startling truths which before they had not been aware of. The strike was called on what the State Board of Mediation and Arbitration later pronounced to be very legitimate grounds. The workers complained of the long hours, comparatively low wages, and in some cases, unsanitary conditions that were intolerable. They demanded a 54-hour week with a regulation of daily hours; the women workers demanded a scale of wages with a $6 minimum, and a $15 maximum, except in the case of hand ironers, who were to be paid by the piece, and who during a good week are able to make between $15 and $20. The Board of Mediation and Arbitration held hearings for several days in succession. The witnesses testified under oath and told stories of long hours and difficult working conditions that in most cases had the ring of sincerity. A member of the Consumers' League made an intensive investigation of a few laundries during the winter of 1910, but the League felt that last winter a more extensive one should be made and accordingly 60 laundries were visited between the months of November and March inclusive.

It might be well to briefly describe the different types of laundries. First let us take the "flat work" laundries: These laundries are usually very large and employ a great number of unskilled women and a proportionate number of men washers. As their name might convey, they do only flat work, that is, bed and table linen for hotels, steamships, Pullman and parlor cars. The hours in these laundries are of necessity very irregular. The hotel linen comes in pretty regularly, but the amount varies greatly, according to the season of the year. The steamship and Pullman car work is very hard to regulate. A steamer comes in late but the laundry must get her work done even though it has one or two days less than usual. These laundries are therefore never able to regulate their work so that it averages under a 60-hour week. The women employed in these laundries work chiefly on the mangles. This is not very skilled work, as already pointed out, is not paid well, and therefore draws a rather low type of workers.

Another and perhaps the most important type of laundry is the "rough dry" laundry, so-called because it returns clothes in a rough dry condition. These laundries formed the storm center of the strike, for we see in them the worst features of the trade. The "rough dry" laundry is also a factory steam laundry, and its particular func-

tion is the doing of washing and starching for the hundreds of little so-called hand laundries scattered through the city. A cut-throat competition exists among these "rough dry" laundries for the work of the hand laundry. Every proprietor of a "rough dry" laundry acknowledges that he can not do the washing at the low rate at which he does it and make it pay, but if he sets his price at ten cents a net, a competing laundry may send out an agent to the hand laundries and offer to do their work for five cents a net, making it impossible for the other man to retain his higher price and still keep his clientele. These laundries receive the work from the hand laundries in nets, and these nets are acknowledged to be the greatest evil of the laundry trade.

Still another type of laundry is the "wet wash" laundry. These are run much as the "rough dry" laundries only they do not dry the clothes. They return them either to the hand laundry or direct to the customer, wrung out but still very damp. These laundries as well as the rough dry laundries do their biggest business with the hand laundries.

The fourth type of laundry is the "bundle" laundry, so-called because of the fact that they have their own branch stores and collect the bundles of laundry directly from their customers, returning them direct when finished. This is by far the best type of laundry. They have the most particular trade; people who want their work to be done under good conditions and done well and who are willing to pay for it. There is much less competition among this class of laundries, as very few of them do any work for the hand laundries. The prices among the "bundle" laundries are almost identical, and it is simply a question with them of securing and maintaining a good private trade.

The last class to be considered is the so-called "hand" laundry: This name is a farce, as in the course of our investigation we only found two "hand" laundries that actually did their own washing on the premises. The remaining 5998 sent their clothes to be washed at the "rough dry" laundries or in a few cases, the "wet wash" laundries. The "hand" laundries do their own ironing and for this reason lay claim to their name, but "bundle" laundries also iron by hand, and the contrast in working conditions between the little crowded "hand" laundry and the large well-equipped "bundle" laundry is not advantageous to the former.

In our investigation of 69 laundries, 19 were "flat work," 17 were "rough dry," 6 were "wet wash," 14 were "bundle," and 12 were

"hand" laundries. Only 6 laundries in New York City had signed up with the Union. We investigated them thoroughly, and found that in every case the wages and hours were unusually good (of necessity because they were scaled by the Union) but the sanitary conditions in all but one instance were very bad.

As a result of our investigations we came to the conclusion that the crying evils of the laundry trade were (1) the use of nets, (2) the irregular hours, and (3) the bitter competition among the "rough dry" laundries.

As to the first point, the nets resemble heavy fish nets and hold from ten to twenty pounds of clothes. Each "hand" laundry has a supply of them and sends its work done up in this way to the "rough dry" laundry. The nets are not supposed to weigh more than ten pounds, but in a great many instances they weigh nearer fifteen, and it makes their handling very difficult. Their weight is practically tripled after washing, so that a net weighing ten pounds before weighs thirty after being washed, and one weighing fifteen weighs forty-five pounds. The men complain of the great difficulty of lifting these heavy nets from the wash wheels to the extractors, and one of the demands of the Union is that no man shall be required to handle a net weighing over ten pounds when dry.

This, however, is not the worst feature of the system. The greatest objection to the use of the net is the fact that every one's clothes are mixed together with no regard for the varying degrees of cleanliness and the fact that some clothes might require a more thorough washing than others. The thought of one's linen being washed thus promiscuously is not pleasant and I think few women realize the danger of the easy spread of disease made possible by this method. The only assorting undertaken is done by the hand laundries. They are forced to separate colored from white clothes, as a strong bleaching fluid, used in the washing of the white nets, would be fatal to colored garments. This bleaching fluid, though the housewife may justly complain that it rots her clothes, performs an exceedingly valuable office. It is so strong that even medical authorities acknowledge it to be a perfectly adequate disinfectant. The so-called colored net is left however without any sanitary precautions being taken in its behalf. Colored clothes cannot stand the bleaching fluid and are therefore washed in a very mild solution, which has little disinfecting power and makes the mixing of clothes in these nets an exceedingly dangerous and unsanitary proceeding. Commissioner Williams, after he had gone into the

subject of nets very thoroughly, felt that we were in dire need of legislation to regulate their handling and if possible we should secure legislation to abolish them. If the net could be abolished it would not only do away with the most unsanitary features of the laundry trade but it would lessen to a great extent the competition among the "rough dry" laundries, for the question of the price of washing per net would not be involved at all, and the prices charged would have to be put on a different basis, probably one similar to that of the "bundle" laundries.

The second evil mentioned, that of irregular hours, affects the worker directly, whereas the first affected chiefly the consumer. It might be well to mention here, however, that the washer who handles the nets before they are bleached runs a great danger of catching some disease, as many contagious diseases can be thus contracted.

To return to the irregularity of the hours, here again the "hand" laundries are very much to blame. They send their nets to the "rough dry" establishments and demand that they shall be done within a certain time, most often within a very short time. They have no regular system of delivering their work to the "rough dry" laundry. They do not request their customers to send their work at regular intervals and therefore in the long run the employee of the "rough dry" laundry has to suffer because of this lack of system. An average week as testified to by the majority of the more skilled workers in laundries, that is hand ironers, collar dampeners, and feeders and starchers is as follows: Mondays, 1 p.m. to 9 p.m.; Tuesday, 7:30 a.m. to 8 p.m.; Wednesday, 7:30 a.m. to 10 p.m.; Thursday, 7:30 a.m. to 10 p.m.; Friday, 7:30 a.m. to 10 p.m.; and Saturday, no work, making (with an hour for dinner) a total of 60 working hours a week.

This is a legal week under the factory regulations, but the 3 long days of 13½ working hours each, coming in direct succession, are illegal, as the law sets a 12-hour limit to the working day. The strain on the worker, because of these long days, is very great and the rest at the end of the week is often not adequate. The women complain of the physical strain. The long hours of standing (often on damp floors) combined with the real physical effort required by the various processes, tells on them eventually and many a woman has to leave the trade a cripple from rheumatism or broken down generally. The laundry trade has no distinctive "industrial disease," but rheumatism is common among workers in laundries where the drainage system is inadequate.

The particular woman who gave this schedule was a collar starcher, earning a flat wage of $10 a week; she had an hour for dinner in the middle of the day but ate her supper as she worked. There were many women who testified to working until 11:30, 12 and even 1 o'clock at night as quite an ordinary thing. These women, though they received no extra pay, were generally piece workers, and during a heavy week their wages sometimes went up as high as $18.

We feel that if the "hand" laundries could be forced to regulate their deliveries to the "rough dry" laundries and the latter could be made to plan a regular week without the free morning on Monday and with a half day on Saturday, the work would then be fairly equalized and the workers would not feel the strain so keenly. The "hand" laundries would need the coöperation of the consumer, in order to do this. No woman should consider it her prerogative to go into a laundry with a bundle of her husband's collars and shirts and insist that they should be sent to her the next evening. She is only adding her share to the tremendous amount of irregularity already in existence, and she should plan as she would in her home, to have the laundry done on a certain day and not expect it to be returned before a reasonable length of time. The Union demands a perfectly regular week, the hours being from 7:30 a.m. to 6:30 p.m. on every day except Saturday, and Saturday from 8 a.m. to 12 noon.

As a whole, wages in laundries seem to be fairly good. A girl can earn a good deal more in a laundry than she can in a department store, but her hours are longer, her surroundings less agreeable, and she has fewer holidays and scarcely ever a vacation. As stated before, wages differ very greatly in the various types of laundries. The "bundle" laundries have undoubtedly the best buildings, the best equipment, and in most cases perfectly sanitary conditions, but as a rule their wages are lower than in the "rough dry" laundries. In most "bundle" laundries the little girls who shake out for the mangle girls (this is the lowest position in a laundry) receive sometimes as low as $4 a week; the mangle girls average $5; the collar girls $7; the starchers and ironers anywhere from $8 to $15. In the "rough dry" laundries the wages do not run very much higher than $15 but the little girls are generally started at $4.50 or $5.

One might judge that a logical explanation of this is the fact that the "rough dry" laundries have not expensive plants to keep in order, have not expensive equipment to keep in repair, and that they spend very little money on sanitary precautions or on improving conditions for

their employees. We believe that in the industrial world wages and the length of the working day are foremost in importance to the worker, but we believe that also the menace to the health of the whole community, which is involved when work is allowed to go on under such conditions, is certainly next in importance. Therefore the Consumers' League urges the patronizing of the big thoroughly organized and splendidly equipped "bundle" laundries. In almost every case the proprietors of these establishments would be glad to raise the wages of their employees if they could do that and at the same time maintain an expensive plant. We feel that if the weight of public favor could be thrown on the side of these large laundries the hundreds of the small laundries could not remain in existence and in that way many unsanitary plants would be closed.

One can make several logical suggestions for improvements in the inspection and regulation of laundries. Considering laundries from the standpoint of the public health it would be an invaluable remedy for the situation if we could have regular supplementary inspection by the Board of Health. The Board of Health has power to act at once upon anything they feel interferes with the public welfare. If, therefore, their inspection could be supplemented to the inspection of the labor department, they could look after the distinctly sanitary side of the problem and could confiscate objectionable nets or condemn inadequate drainage systems or do anything which they felt would lessen the dangers of the trade.

Another practice which we feel needs corrective legislation is the placing of laundries in basements. Out of the 69 laundries visited, 5 did their entire work in the basement and 13 had their wash kitchens there. This is exceedingly objectionable as the air in a basement is apt to be poor at best, and as it is very difficult to prevent steam from escaping in the wash kitchens it makes the atmosphere almost unbearable. The dampness also is increased, and as the floors are generally quite wet under the best conditions, it makes it a dangerous thing for the washers to stand on them hour after hour. We feel that the proper place for a wash room is on the top floor of a building where good ventilation is more easily secured. We found only two laundries having their wash rooms on the top floor. Of the laundries investigated 19 occupied one floor only, so that every process went on in the same room. This is also undesirable, as the wash kitchens are not separated and it means that the steam permeates the whole floor. We would urge legislation in this line just as we urge it regarding cellar bakeries.

Persons desiring to establish laundries should first be compelled to secure a license, and licenses should not be issued for cellar laundries.

The practice which needs the most immediate and stringent attention however, is the use of nets. The best thing would be to abolish their use entirely, but even so, the problem of the colored clothes would still remain. Physicians have recommended that these clothes be put through the hot air sterilizing process, which is used by the Board of Health in cases of clothing belonging to persons who have had contagious diseases. This would be a rather expensive plant for laundries to install, but the majority of laundries have drying rooms and there is no reason why they could not put in a similar apparatus to disinfect the clothes.

This whole problem is one that must be solved by the consumer. We can no longer plead ignorance. We know of the very undesirable conditions which exist; we know of the grave dangers we are running; we know how the irregularity of the trade causes the long hours; we also know that it lies within our power to remedy this irregularity to a great extent. The general public must be made even more familiar with the fallacy of the "hand" laundry, and with the unsanitary conditions of many of the "rough dry" laundries. Then we must urge the patronizing of the finely organized factory laundries with their comparatively short hours and excellent working conditions. With the favor thrown their way it will simply be a case of the survival of the fittest.

SCHOOL LUNCHES AND MEDICAL INSPECTION.[1]

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If we approach the problem of school lunches and medical inspection with a consciousness that they are interdependent and coöperating to secure the same end, we shall better appreciate their educational importance. The school lunch problem is not essentially new. At present, because of various experiments in this country, it stands out in relative importance as compared with the sown field of medical inspection wherein a wider experience has demonstrated its educational value. The purposes of school lunches and medical inspection are largely identical. Both are designed to act in a preventive and curative way in all phases of physical and mental health. Medical inspection seeks in part to eliminate contagious diseases from the public schools, while school lunches aim to increase the resistance of children to contagious diseases. Medical inspection seeks out physical and mental defects; school lunches aim to prevent or relieve physical or mental defects. The common ground of school lunches and medical inspection might well be said to be the prevention, determination, and relief of malnutrition.

Harrington has well stated that education must consider the student as the subject of its teaching. It is easy enough to change teachers and to alter curricula, but much skill and judgment are required to secure improved physique and mentality of children that they may glean the greatest amount of education from the fields of knowledge in which they are permitted to browse. Intellectual development and physical improvement are interwoven. The basis of an impaired mentality is what the educator must seek. Possibly malnutrition is the origin, if so the cure might be in the school lunch. The great difficulty with the statistics of medical inspection is that while they record many symptoms they fail to tabulate the causative factors. The personal equations of the examiners and the lack of judgment in differentiating the significant defects render most of the available statistics of little value.

[1] Presented at the Lake Placid Meeting of the Administration Section of the American Home Economics Association, June, 1912.

Porter of St. Louis has demonstrated that well-developed children take a higher rank than under-developed children of the same age. There is a noteworthy ratio between physical defects and school progress; in brief, the more defects, the slower the advance in school.

In the twelfth report of Dr. Maxwell we find this statement: "Provision should be made in all schools for supplying food at cost price to the pupils in the middle of the day." The educational context of this sentence indicates that some educators are beginning to appreciate the necessity of full stomachs for the school children as a prerequisite to securing full minds. I do not mean by the expression "full stomach" the ordinary common interpretation of quantity, but of the quantity and quality which is essential for the maintenance of physical health and mental improvement. As Bacon states "the brain is in some sort in the custody of the stomach."

It is most striking that lunches are now being supplied to cripples, anemics, tuberculous, and sub-normal children of various types for curative purposes after the medical inspector has called attention to the physical deterioration of the children. Far more sane, far more wise would it be to seek to afford sufficient nourishment to school children in order to maintain them in health or to raise their standard of physical condition, instead of placing a premium upon disease as the basis of securing the benefit of school lunches.

In every community there are many poorly fed children, the inadequacy of whose diet is shown in part as anemia, underweight, enlarged glands, and similar symptoms. Available school lunches would be a boon to such children and are essential for supplying proper nutriment to many children going to school from homes that are unable to supply the requisite daily food, either from ignorance or poverty or both.

Malnutrition is a factor, though to be sure not the only one, in the etiology of tuberculosis, adenitis (enlarged glands), anemia, defects in vision, chorea (St. Vitus Dance), and functional disorders. The immense proportion of dental defects has been given undue attention without appreciating the fact that the permanent teeth develop during the school period. The importance of proper food for the development of dental structure has been lost sight of in contemplating the enormous number of cavities. Poor food, deficient in lime and other salts, means poor teeth and consequent decay. As the result of decay, infection, and tooth-ache, proper mastication becomes impossible, appetite decreases, malnutrition supervenes. There then results a

lessened supply of food for dental growth and more decay ensues and a vicious circle is formed.

A second factor in malnutrition to which insufficient attention has been given, is the effect of the under-nourishment of the years previous to a child's entrance upon school. The relative starvation in proteids, lime, iron, calcium and magnesium during the first five years of life produces the child suffering from malnutrition upon entrance to the public school. The report of the medical inspector, however, will probably class such a child as belonging to the group with such physical defects as enlarged tonsils, anemia, or enlarged glands. The diagnosis of malnutrition is not made if any other defect is present. The dependence of such defect upon malnutrition is not entered into the record and so the statistics of medical inspection as related to malnutrition are decidedly false and misleading.

School lunches are serviceable to the growing children by supplying nutrients that are not adequately secured in the home. In addition to the physical betterment there is a distinct educational gain through the improved mentality of the child. If one recognizes the advantages of feeding anemic children and tuberculous children, it seems unquestionably of advantage to afford similar opportunities to the brothers and sisters of these weakest children so as to prevent their physical deterioration. Chronic underfed children are far more vulnerable to contagious disease and more susceptible to protracted colds and bronchitis. Their poor musculature and sluggish circulation make them more likely to fall victims to the various diseases to which they are exposed through the intimacy of school life, and as a result their absences are more numerous. For the same reason their convalescence is retarded, their complications are more numerous, and their loss of education and training through absence is far greater than that of other children of the same age in a better state of nutrition. One of the underlying factors in chorea is a disturbance of nutrition. The New York Committee on the Physical Welfare of School Children found 26.2 per cent of chorea among children suffering from malnutrition as opposed to only 3.6 per cent for 1400 children examined by them.

In view of our present clamor for fresh air classes, it is essential to consider the necessity of school lunches, inasmuch as increased feeding is required to enable children to live comfortably and study in the open air during the cold seasons of the year.

Viewing it from another angle, school lunches mean better diges-

tion, less bolting of food, and a diminution of the use of pushcart products. Healthful, clean, and nutritious foods offset the adulterated, dusty, irritating articles of diet found for sale on the street corners. Bustle and fear of tardiness are eliminated and the tendency to functional nervous disorders is lessened. The purpose of school lunches is not to relieve acute hunger, but to relieve chronic underfeeding. Hogarth has defined malnutrition as "an abnormal or disordered growth in the development of the tissues and organs of a child's body not necessarily synonymous with underfeeding," and he wisely states: "Malnutrition is at once the most common, and until recently, the least observed of all the unrecognized diseases and affections among children attending elementary schools." The problem of malnutrition is not concerned merely with the breakfastless children or those without any particular single meal, but with all the children who for long periods of time are receiving at home a dietary that is not adapted to their needs, and in consequence of which there is marked physical deterioration. If we consider the amount of malnutrition throughout the country, we can more readily appreciate the truth of this statement.

Dr. McMillan of Chicago found 15.9 per cent of kindergarten children physically below par and estimated that underfeeding was the cause in 11 per cent. Dr. MacKenzie regards one-third of all the school children in Edinburgh as poorly nourished. Dr. Maxwell is reported as saying to the National Educational Association in 1904 that there are hundreds of thousands of children unable to learn because of hunger. Dr. Francis Warner and Hack Tucke found 28.5 per cent of London school children suffering from deficient feeding. The New York Committee on the Physical Welfare of School Children in 1907 declared 13 per cent of 990 children examined to be suffering from malnutrition, and Dr. Sill in 1909 estimated that 40 per cent of the children in the elementary schools of New York City were illy nourished. The New York School Lunch Committee in 1910 in an examination of 2150 children adjudged 13 per cent to be marked cases of malnutrition. In Chicago in 1908, of over 10,000 children examined 12 per cent were reported as suffering from malnutrition. In Boston in 1909, underfeeding was found in 16 per cent of over 5000 children. In Philadelphia in 1910, 24 per cent of 500 children examined were found to be suffering from underfeeding. In St. Paul in 1910, 20 per cent of 3200 children in schools in the poorer districts were reported as manifesting the evidences of marked underfeeding.

What does all this underfeeding mean? It means that the school lunch problem is far more vital than has been considered. The problem of under-nourishment has scarcely been touched. I admit that the causes of under-nourishment are numerous and closely connected with faulty housing, overcrowding, low wages, under-employment, alcoholism, poor hygiene, and ignorance of food values. This is far different from the acute hunger which forces families to seek aid from organized charity.

Taking the estimate of Dr. Underhill, based upon the price of foods in 1907, that 22 cents per day per man is the minimum expenditure for food permitting a normal family to maintain physical efficiency, we can appreciate the economic basis of much of our malnutrition. The Committee on the Standard of Living in New York City has established $825 as a conservative estimate of the amount necessary to maintain a proper standard of living in the Borough of Manhattan. This means an average weekly income for 52 weeks of $16 a week. The effect of income on child growth has been shown by an analysis of the average height and weight of school children in Liverpool, where at seven years the wealthy children measured 3 feet 11 $\frac{3}{4}$ inches and weighed 49 pounds, while poor children measured 3 feet 8 inches and weighed only 43 pounds. At 14 years their heights and weights were respectively 5 feet 1$\frac{3}{4}$ inches and 94$\frac{1}{3}$ pounds as compared with 4 feet 7 inches and 71 pounds.

In a memorandum of the British Board of Education we find noted: "Medical inspection seeks to secure ultimately for every child, normal or defective, conditions of life compatible with the true education, which is that free and effective development of its organic functions, special senses, and its mental powers." That this opinion is shared in the United States is evidenced by the provisions for exceptional children in this country. In 898 cities there are 207 schools for backward children, 94 for defectives, and 25 open air schools, while 444 cities provide for physical examination for defects.

The symptoms of malnutrition which have been overlooked are noted as anemia, pallor, muscular weakness, squints, diseases of the external eye, lassitude, inattention, backwardness, and mental dullness. Among the results are stunted growth, delayed physical and mental development, weaknesses of the spine, increased susceptibility to infectious diseases, and marked liability to tuberculosis. Twenty-five per cent of our public school children fail to attend school 75 per cent of the time. Preventable disease is a large factor in this unfor-

tunate number of absences, and malnutrition plays no small part in preparing the soil for such preventable diseases.

In Berlin in 1906 and 1907 8.7 per cent of the children entering school for the first time were barred because of ill health, and 25.8 per cent of the children were placed under observation because of defects.

Dr. Van der Slice through a questionnaire to school principals as to the causes leading to the lowering of vitality of school children, received the information from teachers that 42 per cent of the stress in the first grade and 12 per cent in the seventh grade is due to poorly cooked, innutritious, or insufficient food. Dr. Gastpar of Stuttgart has demonstrated that the proportion of defects varies with the state of nutrition of the school children, and the better the state of the nutrition, the fewer the number of defects.

The reports of medical inspections are not uniform as may be judged by the fact that in 1906 malnutrition was reported in New York City as 6.3 per cent while Minneapolis in 1908 reported 23.3 per cent. It is obvious that such disproportion does not exist. This fact is accentuated by a comparison of the diseases and defects in the two cities, which are closely related to the problems of malnutrition. For example:

Relative prevalence of diseases in school children.

KIND OF DISEASE.	NEW YORK, 1906.	MINNEAPOLIS, 1908.
	per cent.	*per cent.*
Anterior cervical glands enlarged	37.3	53.0
Posterior cervical glands enlarged	11.0	
Chorea	1.7	0.2
Defective vision	22.8	23.9
Defective teeth	55.0	43.5
Hypertrophied tonsils	23.3	31.1
Adenoids	12.0	12.8

Obviously these figures relating to the symptoms of malnutrition show that the New York figures of 1906 are too low.

The relation between defects of vision and malnutrition is suggested by the examinations in Cleveland in 1907 when the defects of eye-sight in well-to-do districts were stated to be 32.4 per cent, while among the children in congested districts, they were 71.7 per cent. Appreciating the importance of a correlation between malnutrition and defects of vision, which are not all essentially optical in character, it is well to consider the extent of defective vision in some of our cities and states.

Observations on defective vision in children.

LOCALITY.	NUMBER EXAMINED.	DEFECTIVE VISION.
		Per cent.
Bayonne	4,610	7.7
Camden	10,028	27.7
State of Massachusetts	402,937	22.3
Milwaukee	1,960	14.9
New York City	79,065	31.3
Pawtucket	4,663	11.1
Worcester	11,953	19.1

The nature of the defects of vision is not stated in definite terms.

The statistics of medical inspection make another error that is extremely misleading, inasmuch as they are calculated all too frequently in terms of the number of examinations made instead of the number of children examined. It is, therefore, impossible to come to a correct understanding as to the exact number of defects in any one child, or to an appreciation of the relative number of children in the school population suffering from any single pathological condition. The total absence of the term "malnutrition" in many statistical tables shows that this phase of the problem is entirely omitted in a consideration of medical inspection. For example, the state of Massachusetts in 1906 and 1907 reported the examination of 343,000 children having 27,342 defects, but malnutrition is not numbered among the conditions reported.

Dr. Maxwell in his tenth annual report claims that 60 per cent of defective children suffer from malnutrition. This is thoroughly in accord with Dr. Collie of London who in referring to mental defects stated: "Their brains are starved and naturally fail to react to the ordinary methods of elementary teaching."

Now it naturally occurs to most people to ask, would school lunches be of any service in relieving the conditions that have been described? Can school lunches overcome the short-comings of home feeding? If a school lunch is given, will it off-set the disadvantages of the other meals at home? These natural questions are answered, suggestively at least, by several experiments. The experience of Bradford, England, has been supplemented by the experience of many open air schools in this country, but leaving aside for the moment the question as to the value of fresh air, the New York School Lunch Committee studied two groups of children, both adjudged to be suffering from malnutri-

tion, one receiving a school lunch and the other having no change in its daily régime. The group receiving the school lunch averaged a gain of 10½ ounces in three months as compared with a gain of 3⅝ ounces for the children not taking the lunches in the same period of time. In Philadelphia in 1911, this experiment was repeated, and a group of 40 conspicuously ill-nourished children gained 1.78 pounds in 3 months with lunches as compared with 0.8 pound for 40 similar children without the lunches. The children in fresh air classes, as it has been well known, gain in weight and hemoglobin and make marked advances in their studies. The children in one fresh air class in New York City during 1911 who were 11.6 per cent below normal weight at the beginning of the school year, ended the season only 7.4 per cent below normal weight, with an average individual gain of 4.64 pounds. Furthermore, and this is the striking part of the value of school lunches, during the holidays, Thanksgiving, Christmas, and Easter, the children on their home diet lost, on the average, 1.72 pounds per child. The fact that the school lunches marked practically the only difference in their life between the vacation period and the school period, disregarding for the time the added stress of school work, gives valuable testimony as to the efficacy of school lunches in relieving malnutrition to a marked extent.

It is needless to go further into details. The relation between school lunches and medical inspection is patent. Medical inspection should be so thorough as to indicate not merely the names of various symptoms and conditions, but should suggest whether or not malnutrition could possibly be an underlying factor. Under such conditions school lunches could serve in a curative way to assist in the relief of the conditions reported by medical inspectors. Frequently medical inspections would also suggest those children not possessing marked defects, but who are very close to the health poverty line, and for them school lunches could be instituted as part of the preventive measures now so thoroughly esteemed. Most civilized countries have already installed school lunches as a natural and normal part of an education movement without laying unnecessary stress upon its value as a health measure. As medical inspections are regarded to be of advantage to the school system through the lessening of disease and the improvement of the mental calibre of the children, so school lunches may be regarded as a valuable means of decreasing the number of absences and inattention, at the same time increasing mental activity and building up the physical health of our school children.

THE $500, $1000, AND $2000 INCOME.[1]

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In a meeting of a so seriously-intentioned society as the American Home Economics Association, no subject, with the sole exception of pure foods, has a right to a larger space on the program than the one which we shall discuss. With several government volumes already recording the findings of various committees of investigation into the increased cost of living, and with Ex-President Roosevelt and others promising additional inquiries, their promises leaving the implication that having discovered the cause they will immediately remedy it, it is meet that women in every part of the land shall seriously study how they will spend the wage so hardly come by on the part of the wage-earner—that the wisdom and skill in the spending shall match the earnestness and zeal in the earning.

It is time that women definitely discuss the actual value of a loaf of bread in terms of flour, labor, and fuel, and compare the result with the price paid by the consumer when ordering by telephone, delivering by wagon, special and hurried, wrapping, bookkeeper's time for the account, and other expense accessories are added. Whether or not we shall have coöperative bakeries, laundries, groceries, and markets should enter into discussion of this subject; whether or not larger appropriation of money and longer time should be given in the public schools to training in housewifery, also belongs in the argument; but most of all should come the evangelist who shall have the power to awaken all women to the appreciation of the fact that the labor and strain of the husband in earning any one of the stated incomes, should be met by similar earnestness and expression of power on the part of the women in the spending.

Women are the spenders of most of the money that is earned. The laborer who gives the pay envelope to the wife on Saturday night knows this well; so does his wife to whom, in the spending of the same, with all our theories of percentages, food values, and textiles, we have little

[1] Presented at the Chicago Meeting of the National Education Association, July 11, 1912.

to impart, so deeply has life driven the lesson. She knows very well what can be realized from chuck, brisket, and plate cuts of meat. The teacher of household science must gather her classes from a higher social stratum before she will find real ignorance on these subjects. It is true that she can teach the children of the proletariat little charms of preparation and serving which they prize and have joy in taking part in, but the keen wisdom in marketing which poverty has forced upon them has many a lesson for the expert teacher.

Students of theoretical budgets have worked out many elaborate schemes of ideal divisions of income, which, after all, are a generalization from the experiences of the race, and not in any respect original discoveries of methods by which clothing may be increased by diminishing rent or cost of food. All income distribution must in the last analysis base itself on the unit and not the family, but the exact apportionment need, however, concern only such as elect to consider these incomes in a severely academic manner. Since the intention of this paper is rather social and observational, consideration of such points is left to others.

Information for the present discussion has been gathered from many sources, including governmental researches, Mrs. More's admirable work on workingmen's budgets, settlement researches in eastern cities, the very valuable reports on Chicago housing conditions by Miss Breckinridge and Miss Abbott, some very naïve and interesting data furnished by New York public school children through the efforts of an exceptionally valuable principal, and particularly work done by the household arts pupils in Chicago high schools. The information and conclusions of the trained social workers are reliable and workable, they having sifted, preserved, and recorded the matter necessary for generalization. The data and conclusions of the elementary school children and the secondary school pupils are valuable for the illuminating glimpses of the home feeling and attitude toward the life struggle as, for example, the finding that under the heading of amusements, at least one-fourth of the girls state that the girl of 16 years and the boy of 12 years must earn the money for themselves and a girl of 9 years. This computation is made with delightful cheerfulness and no expectation of failing of sufficient diversion. Extensive explanations are made as to why larger allowance is made for the clothing for the girl than for the mother, the implication being that this fact is derogatory to the girl's character unless she makes it quite clear that the condition is temporary.

One of the most striking observations was that the girls who came from homes of small incomes had vastly the better judgment in the value and distribution of money. There were but three pupils of the number who estimated constant hired service in the $2000 income, and but 25 out of 870 girls who estimated occasional hired service (like washing). Not any girl included any hired service in the $1000 or $500 income. Only 11 omitted savings as an inevitable apportionment in the $1000 and $2000 incomes, and more than half of the number included insurance in all three types.

The $500 income instantly became the center of interest to the investigators, since the members of families of this group rarely reach high school, and never unless they are in some way self-supporting. They needed to be constantly reminded that thousands of families are living on that and less. It then became a problem carrying its own satisfaction in academic solution. It seemed to them, as it does to most people, that in the United States with its comparative freedom from caste and inherited privilege, and its half a fruitful continent to feed a nation, it should be impossible that "ten millions of people are sunk in poverty, four millions of them in receipt of relief"—but at any rate we are so informed by no less an authority than Robert Hunter. Half a million laborers in Illinois alone earn an average of only $575 each in a year, and this provided they are employed every working day. The vast number earning below $500 who create this average is appalling to the social worker and should be startling to those enjoying the grace of comfortable incomes.

In the consideration of all the incomes, the ordinary distribution has been used of food, rent, fuel, lighting, clothes, and sundries.

In a carefully compiled government study of 65 average families, consisting of husband and wife and five children, the following figures resulted for the year.

Food	$193.76
Rent	86.31
Fuel	23.90
Lighting	3.69
Clothing	54.18
Sundries	92.16
	$454.00

The item of sundries includes insurance, which most of the families maintain; church, to which many of them contributed; the doctor,

school books, carfares, and other small expenses. Estimating this family as regards food as 4.85 men, the food cost less than 80 cents a week apiece, or less than 12 cents apiece per day. It means all the train of incapacities which belong to under-nourishment, anemia, rickets, susceptibility to disease, inability to do mental work, and frightful strain on moral stamina. Why marvel at shiftlessness, improvidence, bad housekeeping, and yielding to temptation? Marvel, rather, at the persistence of the life spark. The item of fuel $23.90 is increased in interest when it is remembered that the cost of fuel to the poor is increased often more than 50 per cent by reason of their being obliged to buy coal by the bucket and wood by the bundle. It is useless for the economist to counsel the poor on this subject. The woman has not and never can have the money to buy coal by the ton, flour by the barrel, or canned goods by the dozen. One child states innocently that fuel may be had for nothing by the children who hunt it on the railroad tracks. Our tradition that economic precocity should not be forced upon children sounds flat and tasteless as a subject of discourse with a child speaking thus.

The rent item of $86.31, or a trifle more than $7.00 a month, will mean little to people who have not seen the places which can be had for such prices. The reports of Miss Breckinridge and Miss Abbott on Chicago housing conditions are vivid and accurate, setting forth with minute particulars the places out of which thousands of children come daily to the great public schools, confidently expecting the secret to be revealed to them whereby their condition will somehow be magically changed.

The item for clothes for this average family of seven is $54.18 for the year for all. The wife of one of our presidents once chose to tell the women of the country how to dress on $100 per year, and great and loud was the outcry. If any of the women of the 10,000,000 whom Hunter describes, and whom all school teachers know, interested themselves in the controversy, they must have considered it about as entertaining as a recipe for enduring the tedium of a ride in the park in a touring car. Their clothing is haphazard, second-hand, and insufficient. They suffer excruciating misery in winter. The children leave the school room reluctantly, clinging to its warmth and comfort as long as possible. The wretchedness and squalor of the clothes of these poor kill the self-respect of the wearers as fast as they reach consciousness of differences.

The heart of childhood has fires of joy which nothing can quite quench, and no spectacle is more appealing than the grace and aban-

don of these children flinging themselves into the spirit of the folk-dance unconscious of any drawbacks in heavy and broken shoes or ill-fitting and ragged clothes. If one wanders long and far enough in the public schools, one finds a great number of teachers who make up to the children in many ways for the burdens which society lays on their shoulders.

Like Tolstoi and one other, we ask, "What then shall we do?" The public school patiently takes one burden after another upon itself as society wearies or fails under the load, but can society devise any scheme by which the public school may force society to believe that the laborer who works hard every working day and is sober and self-denying, should somehow receive more than $500 a year as a wage for the tireless labor of production, sending in abundance to the markets of the world what immediately returns as a stream of gold? Five hundred dollars cannot clothe, shelter, and feed a normal family, with high resulting efficiency. Thousands of families are subsisting on it, but society will ultimately pay.

It is comparatively easy to work out the budget of the family with only $500 to provide for 365 days. One need not worry over percentages and logical divisions. If the children are naked, spend some money for clothes and go without food; if they are hungry, buy food and go naked; if the rent is due and the landlord impatient pay it and go without both. Books are no problem, since as one child very simply states, "Of course the children of this family will have fund books," meaning the books furnished free to indigent children in schools.

The Industrial Education report of 1900 has an illuminating bulletin on what the trained and untrained man can earn. The man we have been considering is untrained and at 35 years his maximum of $640 is reached, when he declines steadily to $200 at 65 years. The trained man on the other hand at the age of 35 years has reached $1270, climbs on to $1365 at 45, and declines to $1000 at 65 years.

In turning to the budget of $1000, the sum is so princely in the light of the $500 family that one is tempted to become scientific. Indeed, to use the city of Chicago as an illustration of a large city, it is found by generalization from the latest census report that $1202.55 per year is the average wage of the salaried person, the term salary applying to the person paid weekly, monthly, or yearly in distinction from the one paid by the day. There are in this city 54,821 such, who on this average salary support from one to seven and often more people. Add the fact that the purchasing power of these dollars is steadily decreasing, so that the money which would have purchased 100 loaves

of bread 10 years ago will buy but 95 today "with no relief in sight," one is forced to the experiment of attempting to make mathematics take the place of bread and butter, and long study of the method of spending the money make up for the meagreness of the amount to be distributed.

Dr. Engel teaches that whatever the income, we shall find the items of rent and clothing maintaining a constant average for each 25 per cent of the income. Mrs. Richards differs so slightly from the Engel generalization that the variation may be ignored. It is a very interesting phenomenon that it is the experience of the race upon which we depend for scientific data. None of the sociologists pretends to teach that the world is doing the thing wrongly. They simply arrange the data in an orderly way and call it a science, which after all, is the definition of science. In shelter, people, like water, tend to seek their level, and if they ambitiously or unwisely strive to reach above it and violate the law of ratio, again, like water, they are unstable and tend to calamity.

Thus, if the $1000 salary is drawn upon for more than $250 in rent, food or clothing or other well-being is endangered. So definitely is this fact fixed in the minds of most people that we decide promptly and with great definiteness concerning our neighbors, that they are or are not living in a house they cannot "afford." Hygienic conditions above all, availability to school, and other cultural influences, character for decency of the neighborhood, kind of highways, transportation, lighting—all must enter into the selection of this house which shall cost the tenant but a trifle over $20 a month. The pushing on of tenants caused by business occupation of the neighborhood with consequent increase of value of ground space, as well as improvements adding to value of the environment, forces this $1000 family farther into the suburbs where soon the inherent and compelling desire to own one's home brings a deepening of thoughtfulness about expenditure which presently analyzes the budget quite as skillfully as Engel with all his mass of material. Nothing can more swiftly and surely steady and improve good citizenship than owning a home. It quickens the imagination as to what it means to the other fellow if a neighborhood is degraded by liquor selling, the social evil, or whether or not it is a hardship to have poor streets, poor lighting, poor sanitation. The welfare of the group is a matter of indifference to the casual dweller, but the family whose "place" has been paid for by pinching and saving is there to stay and environment is important.

This family of five must be clothed with another $250. Scientific analysis of the family makes it equivalent to 4 men, who may spend $62.50 apiece on clothing. This must mean boots, hats, and underwear in sufficiency; outer clothing of decency and respectability. The mother must appear at the woman's or parent and teacher's club with her appearance in keeping with her hopes and ambitions for the children. It is easy for the public schools to prepare women to carry on nearly all the clothing construction for the family in the home, thus increasing both quantity, and better than that, quality. But it is difficult to preserve this valuable attitude of self-sufficiency in the presence of the pageant of complexity, gorgeousness, and display which the pupils see in the windows of the department stores. If for two years influential shops should elect to present in their windows simplicity and refinement alone, the effect on the girls who are destined to marry the man with a salary of $1000 or less, or *more*, would be so far-reaching that all of society would feel the effect in a clearer basing of real values in living. Those who ride with wage and salary earners morning and evening, study their faces, hear their casual conversation, and see them rush to their work, feel somewhat of the strain of human effort that provides money for the tawdry, the elaborate, the bizarre, and the useless that seem to attract so easily when displayed in the shop windows.

The problem of warmth and comfort must be faced, and the woman who faces the task of buying the woolen clothes for the household has an opportunity to sit in judgment upon the "fine Italian hand" of the tariff maker. It will be an interesting moment when some considerable numbers of women come together, as they did recently at San Francisco, and spend an equally considerable length of time studying Schedule K. It will be valuable to hear their conclusions as to why one may not for a reasonable sum of money shelter the children from the biting north wind. The writer saw a woman shopping for "all wool" dress goods and after tediously ravelling and pulling she said, "Well, I will take the samples home; I will be back tomorrow." The clerk turned to the next customer with a weary smile. The customer asked, "Do you have many like that?" and he answered, "No," and both, much relieved, turned to the customer's affairs—and yet this was precisely what all women should do. The buyer of the department store did just that, only more thoroughly. The woman is spending the money capital of the business in which she is engaged for life, and if she scorns to be a good buyer or if she is too ignorant to be a good

buyer either the family is cold and hungry or the bread winner must make another spurt to make up for her mistakes.

Food has a ratio which is in inverse proportion to the size of the salary. In a $500 income it was 60 per cent, in a $1000 income it is 30 per cent. Here more than anywhere else in the home management the mother needs knowledge, good judgment, and diligence in business. Regarding this family still as the scientific unit of 4 men, there is the sum of $300 to be spent for food. This represents $75 apiece for the scientific unit, or $1.44 a week for each. Discussing this subject not long since with one of the most expert dietitians in the country she declared that it could not be done except with as large a group as twenty, considering the standard of living which should be maintained. But the reply is unanswerable that it is done. We can count the calories and remain in consternation at the results, but meanwhile the children grow and prosper in and out of school. Their eyes are bright, their heads are clear, their spirits are high, they leap and run. Their well-being is maintained, but a scrutiny of the hands of the mother is very revealing as to where the burden falls of keeping the children well, strong, and happy. The children pick up many pennies at trifling tasks which pay for their pleasures and often help pay the grocer. They get an economic precocity which is often revealed by outbursts of almost supernatural wisdom on the part of children in the cookery classes as to where extraordinary grocery bargains may be had in the neighborhood—children of eleven and twelve ask the privilege of buying in class quantities at preserving time, describing all the while with tumultuous eagerness the variation in prices in the range of half a dozen blocks in all directions. Mother has not yet taught them the saving that can be managed by the use of the telephone.

These people, like the other group, cannot buy in large quantities; they must pay the everlasting and crushing tax of the person whose crime is having meager money in his purse. Instead of buying six bars of soap for a quarter they must purchase five bars at five cents each. They must buy potatoes by the small measure, and canned vegetables by the can, with all the extravagance in prices which this implies. The remaining $200 must be divided among fuel, light, church, insurance, carfare, amusements, school books, the doctor, incidentals, and *savings*. Out of hundreds of budget problems worked out by high school girls in Chicago, only eleven omitted *savings*. If one is over-inclined towards pessimism throw a problem which is real into the hands of a group of high school girls. One hears vast lamentation of their frivolity, of their extravagance, of their lack of purpose—

space is lacking for discussion of this—but this statement is reiterated: With hundreds of high school girls working on a budget of $1000 per year for a family of five, only eleven omitted *savings*. Their attitude towards insurance has already been indicated. Their conclusions in regard to clothing invariably carried the definite implication that they were to make the clothes themselves, including hats. It is true that the household arts group in the high school is not preponderant, except, of course, in the Girls' Technical High School. In this school the details of the budgets were worked out sufficiently in detail to be a working program for the inexperienced. All schools brought power enough to the question so that from thirteen high schools working independently and freely the final generalizations were those of Engel and Mrs. Richards. The variation was the constantly recurring expectation that the older children were to contribute something to their own support—and all precluded any type of private instruction.

The $2000 income should maintain a 20 per cent average for rent and clothing (and this average is a veritable average of the three incomes) and practically the same average for food, which gives the unit $2 a week for food in this family. This again means close and careful buying—$1200 is thus used for food, clothing and shelter. The operating expenses, such as fuel, lighting, service, if any, and what Mrs. Richards calls "higher life"—meaning books, travel, insurance, and so forth—are included in the remaining $800. The attitude of the high school girls is that there should be very little hired service in the families with this income. They very perceptibly increased the appropriation for church and charity—also laying great stress on dentistry, as if this were a luxury—as it is to so many. To anyone with serious intention to be valuable to the world in ways great or small a perusal of Miss Addams' Spirit of Youth in the City Streets will explain the steady increase in the percentage allowed by the girls in the graded budgets for *amusement*—all were very definite—many describing where good things were to be found for a small sum.

Much stress has been laid on what the girls did since it brought out so much of realization of money values. The discussion of the $500 income in many cases spread through the whole school and into the neighborhoods and deepened the responsibility of the students towards the necessity of understanding.

As in the beginning so in the closing of this paper, the contention is made that most of the money that is earned is spent by woman and the returns from it will be in direct proportion to her wisdom, her intelligence, and her vision.

PRACTICE FIELDS IN HOUSEHOLD AND INSTITUTIONAL MANAGEMENT.[1]

EMMA H. GUNTHER.

Teachers College.

By practice fields reference is made to any opportunity outside the laboratory for practical work in either household or institutional management. The idea is not a new one, for fifty years ago Catherine E. Beecher in her Educational Reminiscences and Suggestions made this suggestion:

> The domestic department would be provided with model dwelling houses, illustrating proper and tasteful modes of construction, furniture, ornamentation, warming, and ventilation. The family in each dwelling would consist of the principal, associate principal, and ten pupils, and they would do all the family work, except, of the heavier sort. A circulating system would employ every member of the family one or two hours, in such rotation that in a given time each one will have been instructed in and will perform every operation included in family life. When each pupil is thus trained, she will give place to another of the scholars and each would remain a longer or shorter time according to proficiency acquired at school or at home.

This is early proof of the importance attached to the establishing of some field for practical training that approaches in a measure, at least, living conditions; that is, a plan in conjunction with, or a step beyond, present-day laboratory methods, whereby conditions may be met as they really exist.

Laboratories are being perfected to the minutest detail regarding equipment; laboratory methods are embracing every possible practical phase for the administrator, not only of the home but of the various forms of institutions. Nevertheless it is the universal decision—especially regarding those applying for institutional posts—that not less of theory is needed, but infinitely more experience in judicious, sensible, practical application. How is this to be met?

Knowing that many in Home Economics departments were realizing the inadequacy of past methods, and were attempting to supple-

[1] Presented at the Lake Placid Meeting of the Administration Section of the American Home Economics Association, June, 1912.

ment these in various ways, a questionnaire was sent out aiming to collect statements of various plans used in furnishing practice fields for home and institutional management. It was hoped that these might form the basis for suggestions and study. The two main points in the questionnaire were (1) whether a course or courses were offered in household management or institutional management; (2) whether opportunity was offered in these courses or elsewhere—outside the laboratory—for practice field work.

Of 100 letters sent out to universities and colleges, 75 replies were received, of which 39, or about half, answered negatively—that is, in connection with their course in household management or household administration no opportunity for practical work was given outside of the laboratory. No institutional management courses among these were mentioned. Of the remaining half, 29 gave reports embracing these following features outlined in the other points of the questionnaire: (1) Where practice work is given—the college dormitory, lunch room, demonstration apartment, model cottage, etc.; (2) what it includes—marketing, cooking, menu making, serving room work, dining room service, care of rooms, cleaning, buying household supplies, supervision of tasks and workers, laundering, or business administration; (3) when given—concurrently with theoretical work, at the end of the theoretical work, optional, or compulsory; (4) by whom supervised—the instructor, supervisor of practice work, or special director of the dormitory; (5) the form—reports, detailed studies, independent investigations, individual conferences, and discussions in groups or classes; (6) handling of money involved, account keeping; (7) apprentice work—substitutes for one-half day, one month, or more, and (8) whether students are experienced, and whether apprenticeship experience is necessary.

Given briefly, the reports regarding practice fields were as follows:

(1) *Model or Practice Cottage.*—Six colleges have this plan, the cottage being occupied by instructors, and students doing certain duties at stated times; or occupied by a few students who live there for a period of time with an instructor, and carry on all the activities of the home. The work of housekeeping is under the supervision of the instructor.

(2) *Demonstration Apartment.*—Ten colleges report the use of such an apartment where to a certain extent home conditions are duplicated. The greatest value obtains from those in which students may live with one or more teachers, otherwise the results are lacking in many respects. Here, as in the model cottage, students learn to take responsibility

in the various phases of housekeeping. The University of Nebraska reports as follows:

> The dormitory for the girls in the School of Agriculture closes in April. After they are gone five rooms in the dormitory are fitted up for housekeeping purposes, and groups of three or four girls who are taking the course in household administration come and live in these rooms for a shorter or longer period. They do their own work, make their own menus, and do their own buying and keeping of accounts. They write out a report of the work, including expenditures of time and money. These are discussed in class and individually.

At the State Normal School of Manual Arts and Home Economics, Santa Barbara, Cal., students are advised to do housekeeping in furnished houses and apartments for their practical training.

(3) *College Dormitory.*—Six colleges carry on practical work in dormitories. In one college giving a course in household management, students clean rooms for inspection, while in another they apply in the dormitory knowledge of floor finishes, furniture polishes, utensil cleansers, and the like. To quote from the University of Minnesota: "We have a group of college girls who live in the dormitories of the School of Agriculture, and who take the responsibility of the inspection of rooms and who act as advisers and assistants in the management of the home life of the school pupils."

Seven reported courses in institutional management with practice field work, namely, the University of Chicago, Simmons College, Michigan State Agricultural College, Mechanics Institute of Rochester, N. Y., Pratt Institute, Teachers College of Columbia University, and the University of Wisconsin. Of these, three use college dormitories for practice fields besides additional work in lunch rooms. One plan is this: Students take charge in the serving room, study the dining room service, do large quantity cooking, order, receive, inspect supplies, and make menus. In the housekeeping they take stock of the linen, mark and mend it, and take the linen inventory; inspect cleaning and make time studies; order household supplies and, at stated periods, carry on the business administration. Another writes: "For institutional management, visits are made to various institutions and to tea rooms, and discussions follow of methods and means."

(4) *Lunch Rooms.*—Eight colleges make use of these for their field work. In the University of Chicago students serve from 500 to 600 people each day at their club. To quote from another: "Two of our students run a cafeteria five days in the week, serving from 50 to 100 people, and other students have practice under them as helpers, cooks,

cashier, and serving at the counter." Others report similar work. Students in one college serve 10-cent lunches to 20 faculty members, and also serve meals in the homes of the faculty. Another plan is that of students taking entire charge of banquets of from 70 to 500 plates. Numbers of cases might be cited where students have practice in furnishing food for special functions. One writes: "Recently our engineers built a road on the campus and my juniors furnished dinner for 150 working men." From another (Bradley Polytechnic Institute):

> We give all our senior students practice in cooking in the school lunch room kitchen where they also observe the methods of carrying on the work there and concerning which a number of lectures are given by the manager of the lunch room. This is done for the benefit of those who go out as teachers where the oversight of a lunch room may be required. In the majority of cases reported, the practical work is given concurrently with the theoretical, but a few give it at the end of the classes in theory. Almost all make the practice compulsory.

To summarize: Regarding supervision, it is in most colleges in charge of the instructor of the course, who may at the same time be director of the dormitory. In two instances, a supervisor of practice work is in charge.

Reports, individual conferences, and discussions in groups were the plans followed by the majority. About one-third used also the method of independent investigations. As regards handling of money in actual buying, there are but a few that noted experience in this line. To quote: "Food purchases for a family of six, and purchase of fuel for the kitchen and dining room. Accounts of same." "Cash allowance for a series of meals. Itemized bills for a series of meals and totals." Another writes: "Girls take responsibility of actual buying. Lunch accounts are kept." Also, "$4 per week is given each student during the time of the course. With this she must meet all expenses of food for four people for five meals; namely, a five-course formal dinner, a three-course informal dinner, and three luncheons. The ice, laundry, and fuel bills are not included in the amount given the student but are carefully figured by her and paid by the department." To these questions concerning money and accounts, the greater number answered in the negative.

The answers to the inquiry as to methods of testing students' ability to meet responsibility by having them act as substitutes for a period of time were as follows: Four used the plan of students spending one-half day as substitutes in charge of a department; in one college they spend a day; in two they devote one week; in another they give

one month; in one they demand that the students spend three months. Several replied: "Have not come to any decision on this point as yet." All replies save two were "No" to the question, "Are the majority of students in institutional management those having had previous experience and responsibility?" Almost every answer was in the affirmative as to whether some experience of the apprenticeship type is necessary in preparing women for administrative work.

To see the trend of thought regarding proposed plans for the coming year several might be quoted: "We do not as yet offer a course leading to administrative positions, but are thinking of introducing such a course when our new dormitory is completed." "Plans for new building to be used in 1913 contain institutional kitchen, large dining room, and an apartment. It is expected that practice work will be given in household management and institutional cookery." (University of Illinois). "Our department has been so hampered for lack of space and opportunity for institutional work that we can not make a good report. We are to have our new building next year, when I hope we shall be able to report something." (Cornell University.) Another (Middlebury College): "We are just organizing for next year a demonstration apartment in our college dormitory." "A future hope is to have a house equipped for the practical 'try out' of class room teaching."

From the educational department of the Y.W.C.A. in St. Louis, Mo., comes this: "We have just moved into our new half-million dollar property which has a very complete and up-to-date equipment for domestic science, including a cafeteria which would give us a splendid chance to introduce training in institutional management. We have already been discussing plans for such a course of study."

Added to this we find statements from those now carrying on some practice field work to this effect: "Quarters inadequate at present. New building next year will make it possible to do more extensive work." "More time next year to practice work." "We do comparatively little with household management on account of present cramped quarters—we have rooms and equipment for a full and thorough course planned in the prospective new building." "Our work in house practice was introduced this past year, so it is only in the experimental stage. We hope to enlarge it next year."

It is interesting to glance at a few of the housekeeping schools in Europe, noting especially what they offer in the way of a practice field. Barring classes in institutional cookery given in the National

Cooking School, Buckingham Palace Road, London, there seems to be little offered in England for institutional training. In National Societies Training College, West Hampstead, N. W., London, the students use rooms in the dormitory for practical work. The house used in connection with the Clapham High School, Domestic Science Department, accommodates six students with the lady directress. The girls take turns in managing the home, supervising the household, buying, keeping accounts, playing hostess, etc. At the Battersea Polytechnic, Park Road, the girls cater for about 100 people—besides doing much practical work in housekeeping. In Colonial Training College, Stoke Prior, Bromsgrove, where students receive practical training for work in the colonies, "the pupils do all the work of the home, taking it in turns, from scrubbing floors and cleaning grates to preparing meals."

In the Edinburgh School of Domestic Economy, there is a model house of three rooms where the practical work in housekeeping is carried on. The students take turns in being responsible for the household routine, house linen, marketing, and house bookkeeping, besides having duties in the kitchen, scullery, store room, and larder. A similar plan is that of the Household Arts School at Berne, Switzerland, where groups of girls carry on the work of the house, besides offering rooms and board to three others who pay for this privilege. Not unlike this are those Household Arts Schools at Ralligen and at Worb, Switzerland, where housekeeping opportunities are offered.

Germany provides many such housekeeping practice fields, as does Denmark, the one at Aarhus having the plan of 6 girls out of the 24 taking turns at keeping house. One is housekeeper, doing the marketing; one does chamber work, another laundry work, another baking, while all assist in the cooking.

What are our conclusions with this glimpse of the plan followed in a few housekeeping schools of Europe, and from the tabulations of the questionnaire from which we know to a certain extent what is incorporated in the idea of practice fields, at least for household administrations? Are we ready to champion the cause of practice fields? Does this method seem to be the ultimate step beyond our now well-established laboratory method? For the method employed, whether cottage, dormitory, or lunch room, it would seem essential that the field that is used should most nearly approach living conditions to be met by the students later—not merely the routine of living, but the "unexpecteds" that are always arising and which demand a judicious and wise executive. Whatever the plan—be it under conditions ideal or

using the place that is available now—actual power is gained by the doing. Observation has its place and a valuable one—but every opportunity given a student to fit into the actual day's work—especially for institutional workers—is a valuable asset to her. Hence students are eager to do summer work in inns, tea rooms, small hotels, etc., taking positions of responsibility wherever possible. The time that this work is given—whether with the theoretical or at the end—seems to be a matter that is governed by the conditions.

Numbers are small in most cases as yet, so that individual conferences are possible. They are especially necessary where students are experienced and are working at special problems. Can the methods employed with practice teachers in normal schools or with nurses in training schools be used in this kind of practice work—that is, by individual conferences first, followed by observation periods—then while the student is doing the work, by supervision to a certain extent? Later, the student presents a written report in outline form, or drawings, enough to help organize the material and fix it, and a conference is held regarding this and other reports for comparisons. The broad features and general deductions may be brought up in class later.

The plan of the apprenticeship system—as followed to a certain extent by pupil dietitians—is now under discussion for those to be college dormitory assistants, lunch room managers, housekeepers in hospitals, etc. Is it possible to enlarge along this line, to place out to a much greater extent for practice those not competent to take positions because lacking in experience? How can we best prepare our students for the work of an institution—where such emphatically important points are at issue—that they have sufficient practice to know the best times for marketing, and to become keen in the recognizing of schemes for frauds in all phases of food purchases; that they have sufficient practice to know what the saving in a large institution of a fraction of a cent per person means; to have sufficient chance to secure the skill that is attainable through practice in making suitable and balanced menus; to have practice enough in trying out the working of labor-savers to be convinced of their usefulness or uselessness; and to have sufficient practice to know what supervision means of numbers of people in service, and to appreciate the significance of tact, sympathy, poise, and self-confidence?

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MARY D. S. ROSE.

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ADMINISTRATION SECTION MEETING, LAKE PLACID, NEW YORK.

Upon invitation of the Lake Placid Club, the Administration Section of the American Home Economics Association held its third annual meeting at the Lake Placid Club, Essex County, New York, from June 22 to 26, 1912. The program as presented at the meeting was as follows:

PROGRAM.

Saturday, June 22, 9.30 a.m.

Address of welcome, by Melvil Dewey, president Lake Placid Club.

Committee on Administration, Mrs. Dewey, honorary chairman.

The Problem of an Agricultural College Dining Hall for 500, Mary Urie Watson, MacDonald Institute, Guelph, Ontario.

Data Regarding the Kind and Cost of Food Served at a Club for Men, Dr. C. F. Langworthy, United States Department of Agriculture, Washington, D. C.

Directions for Kitchen and Dining-room Employees, Mrs. Dewey.

Saturday, 8.00 p.m.

Administration in the Private Home, Flora Rose, Cornell University, chairman.

The Relation of Household Administration to Public Utilities, Martha Bensley Bruére, New York City.

Facilities for Marketing and Cost of Living, E. E. Pratt, New York Food Investigating Commission.

Monday, June 24, 9.30 a.m.

Committee on Laundries, S. Maria Elliott, Simmons College, chairman.

Report on Organization and Administration of Institution Laundries.

Regulation and Inspection of Commercial Laundries, Helen Woodford Pratt, Consumers' League, New York City. William C. Rogers, deputy state commissioner of labor, Albany, N. Y.

Monday, 8.00 p.m.

Efficiency in Administration, Emma H. Gunther, chairman.

Principles of Scientific Management Applied to the Household and Institution, Frank B. Gilbreth, consulting engineer, New York City.

Discussion: Wanted, A Test for "Man Power," introduced by Mrs. Dewey.

Tuesday, June 25, 9.30 a.m.

Committee on Education, Sarah Louise Arnold, dean of Simmons College, chairman.

Report on Instruction in Household and Institution Administration, Miss Arnold.

Practice Fields of Training for Household and Institution Management, Emma H. Gunther, School of Practical Arts, Teachers College, New York City.

Tuesday, 8.00 p.m.

Committee on School Lunches, Louise Stevens Bryant, chairman, University of Pennsylvania, Philadelphia.

General Development and Present Status of School Feeding Movement, Mrs. Bryant.

School Lunches and Medical Inspection, Ira S. Wile, M.D., New York City.

Elementary School Lunches in Smaller Cities, Alice M. Hotchkin, Director School Lunches, Rochester, N. Y.

Wednesday, June 26, 9.30 a.m.

Committee on Institutional Accounts and Records, William Morse Cole, Harvard University, chairman.

Report of Committee on Buying Supplies, Henry C. Wright, Russell Sage Foundation, chairman.

Food per Capita, Melvil Dewey, Lake Placid Club.

Wednesday, 8.00 p.m.

Committee on Dietaries, Florence Corbett, Whittier Hall, Teachers College, New York City, chairman.

Dietary Criticism and Food Surveys, Miss Corbett.

The Hospital Diet Kitchen, M. C. Little, Polyclinic Hospital, New York City.

The Coöperation of Dietitian and Physician, E. Grace McCullough, Boston, Mass.

The Housekeeper Dietitian in the Hospital Field, Miss Lindsley, Woman's Hospital, New York City.

The first session was called to order by Miss Van Rensselaer, secretary-treasurer of the section, in the absence of Miss Nutting, chairman. Mr. Dewey, president of the Lake Placid Club made an address of welcome, in which he called attention to the fact that the American Home Economics Association had its beginnings at Lake Placid, and that, although the movement had made great strides in the past thirteen years it was still in its infancy. At the close of Mr. Dewey's talk, Miss Van Rensselaer reminded those present that the department of Institutional Management had been inaugurated

by Mr. and Mrs. Dewey, and that many other enterprises that have since become valuable agencies for public good were started at Lake Placid.

All of the meetings were full of interest, and the members present were most enthusiastic over the work of the section.

At the closing session, resolutions were passed thanking Mr. and Mrs. Dewey for their hospitality and for the many kindnesses extended to the members.

Some of the papers presented will be found in this issue.

A detailed account of the meeting, with other papers presented and the discussions which followed, will appear in a subsequent issue of the JOURNAL.

MEMBERS OF THE ADMINISTRATION SECTION PRESENT AT THE LAKE PLACID MEETING.

Balderston, L. Ray, Instructor of Laundering, Teachers College, New York City.

Barker, Mrs., A.B., Housekeeper, 630 Huron Street, Toronto, Canada.

Bruére, Martha Bensley, Writer, 39½ Washington Square, New York City.

Bruére, Robert W., Writer on social economics, *Harpers Monthly*, etc., 39½ Washington Square, New York City.

Bryant, Louise Stevens, In charge Social Service Department, Member of School Lunch Committee of Home Economics Association of Philadelphia, University of Pennsylvania, Philadelphia.

Cary, Mrs. C. McK., Superintendent Domestic Affairs, Wells College, Aurora, N. Y.

Chesley, William, Manager Dining Hall, Massachusetts Agricultural College, Amherst, Mass.

Child, Ruth K., Confidential Inspector for the Fiscal Supervisor of State Charities, 477 Dana Avenue, Albany, N. Y.

Cole, William Morse, Professor of Accounting, Harvard University, 55 Brewster Street, Cambridge, Mass.

Cooper, Lenna F., Dietitian and Director of Domestic Science, Battle Creek Sanitarium, Battle Creek, Michigan.

Corbett, Florence R., Instructor, Teachers College, Director Whittier Hall Dining Rooms, 1230 Amsterdam Avenue, New York City.

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Dewey, Melvil, President Lake Placid Club, Essex County, N. Y.

Eckman, Rena S., Dietitian, Massachusetts General Hospital, Boston, Mass.

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Fisher, Florence C., Richmond, Indiana.

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Harris, Rowland H., Member of the Board of Trustees and Junior Surgeon Battle Creek Sanitarium, Battle Creek, Michigan.

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Hill, Ruth C., Purchasing Agent and Manager Lunch Room, Radcliffe College, 44 Martin Street, Cambridge, Mass.

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Pratt, Edward E., Mead Statistican New York Food Investigation Committee, 9 Livingston Place, New York City.

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Sykes, Carol, Dietitian, State Hospital, Scranton, Pa.

Taylor, John Lewis, Assistant Comptroller Harvard University, and Treasurer Symmes Arlington Hospital, Dane Hall, Cambridge, Mass.

Tennent, J. Ethel, Superintendent of Students' Residence, University, Saskatoon, Sask., Canada.

Treat, Nola, Director Public School Lunch Room, 320 W. North St., Decatur, Ill.

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Van Rensselaer, Martha, Professor of Home Economics, Cornell University, Ithaca, N. Y.

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Wile, Ira S., M.D., Member New York School Lunch Committee, New York Milk Committee, Lecturer on Dietetics, etc., New York City Food Committee, 230 West 97th St., New York City.

Williams, Grace F., Instructor in Domestic Science, Milwaukee-Downer College, Milwaukee, Wis.

Wood, Angeline, Home Economist in State School of Agriculture, Alfred, N. Y.

GRADUATE SCHOOL OF HOME ECONOMICS.

The Fourth Graduate School of Home Economics was held at the Michigan Agricultural College, East Lansing, Michigan, from July 1 to 26, at the same time and place as the Graduate School of Agriculture. As in former years arrangements were made so that students in either school could attend lectures in both schools. The course this year was extended from two to four weeks, in order that laboratory courses in food microbiology and chemistry could be given.

The attendance was much larger than ever before, students registering from thirteen states. It is interesting to note the various lines that the members were following, teachers in colleges, normal, high, and grade schools, supervisors of Home Economics in schools, dietitians, and housekeepers, by far the greater number being teachers.

The program of the school, and lectures given in the Graduate School of Agriculture which were of especial interest to the Home Economics student, are given below. In addition to the regular program, there were several social events which served to bring the students of the two schools together, an excursion to a mint farm, an inspection trip to a city milk factory, etc. The committee in charge of the school consisted of Mrs. Alice P. Norton, chairman, Miss Edna D. Day, Miss Abby L. Marlatt, Miss Martha Van Rensselaer, Miss Maude Gilchrist, Miss Agnes Hunt, Dr. C. F. Langworthy, and Dr. L. B. Mendel.

PROGRAM.

Monday, July 1.

8.00–9.00 a.m. [1] Dr. H. C. Sherman, professor of food chemistry, Columbia University: Functions of Food and of the Digestive Ferments.

9.30–11.30 a.m. Dr. J. Merritt Matthews, consulting chemist to the textile industries, New York City: Fundamental Properties of Textiles.

1.00–3.00 p.m. Conference, led by Mrs. Alice P. Norton, University of Chicago: General Scope of the Work.

2.00–3.00 p.m.[1] Dr. T. N. Carver, professor of political economy, Harvard University: The Law of Limiting Factors and Its Bearing upon the Distribution of Wealth and Population as Between Country and City.

[1] Given in the Graduate School of Agriculture.

2.00–3.00 p.m.[1] Dr. H. N. Ogden, professor of sanitary engineering, Cornell University: Methods of Estimating the Value of Sanitation.

1.00–3.00 p.m. Bacteriology Laboratory, Dr. Otto Rahn, assistant professor of bacteriology, Michigan Agricultural College. Chemistry Laboratory, Prof. Frank S. Kedzie, Michigan Agricultural College.

3.00–5.00 p.m.[1] Dr. Sherman: Seminar.

Tuesday, July 2.

8.00–9.00 a.m.[1] Dr. Sherman: Protease and Lipase.

9.30–11.30 a.m. Dr. Matthews: Textile Fibers, Wool and Hair Fibers, Related Fibers.

1.00–3.00 p.m. Bacteriology Laboratory. Chemistry Laboratory.

2.00–3.00 p.m.[1] Dr. Carver: The Economizing of Human Energy in Rural as Compared with Urban Industries.

2.00–3.00 p.m.[1] Dr. Ogden: Pure Water and the Results of Pollution.

3.00–5.00 p.m. Dr. N. E. Goldthwaite, assistant professor of household science, University of Illinois: The Principles of Jelly Making.

Wednesday, July 3.

8.00–9.00 a.m.[1] Dr. Sherman: Sucrase and Amylase.

9.30–11.30 a.m. Dr. Matthews: Silk: Microscopical and Physical Properties. Chemical Nature and Property of Silk.

1.00–3.00 p.m. Bacteriology Laboratory. Chemistry Laboratory.

2.00–3.00 p.m.[1] Dr. Carver: The Economizing of Land.

2.00–3.00 p.m.[1] Dr. Ogden: The Purification of Water.

3.00–5.00 p.m. Dr. Sherman: Seminar-Dietetics.

8.00–10.00 p.m. Public Opening: Dr. Armsby presiding. President Snyder, Dean Shaw, Dr. True, Dean Gilchrist.

Thursday, July 4.

8.00–9.00 a.m.[1] Dr. Sherman: Utilization of Specific Food Materials (1).

9.30–11.30 a.m. Dr. Matthews: Vegetable Fibers: Physical Structures, Chemical Constitution, Chemical Reactions.

1.00–3.00 p.m. Bacteriology Laboratory. Chemistry Laboratory.

2.00–3.00 p.m.[1] Dr. Carver: Do We Want a Larger Product per Acre, or a Larger Product per Man?

2.00–3.00 p.m.[1] Dr. Ogden: Sewerage and Sewage Disposal by Dilution.

3.00–5.00 p.m. Dr. Matthews: Seminar-Textiles.

Friday, July 5.

8.00–9.00 a.m.[1] Dr. Sherman: Utilization of Specific Food Materials (2).

9.30–11.30 a.m. Dr. Matthews: Chemical Reactions (continued): Dye Stuffs. Conditions of Mercerizing. Properties of Mercerized Cotton.

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[1] Given in the Graduate School of Agriculture.

1.00–3.00 p.m. Bacteriology Laboratory. Chemistry Laboratory.
2.00–3.00 p.m.[1] Dr. Carver: The Rural Population.
2.00–3.00 p.m.[1] Dr. Ogden: Sewage Purification.
3.00–5.00 p.m.[1] Dr. Carver: Seminar.

Saturday, July 6.

9.00–11.00 a.m.[1] Conference, College Instruction in Agriculture, led by Dean T. F. Hunt, Pennsylvania State College.

Monday, July 8.

8.00–9.00 a.m.[1] Dr. L. B. Mendel, professor of physiological chemistry, Yale University: The Biochemistry of Selected Tissues.
9.30–10.30 a.m. Conference: Aims in Domestic Science Teaching, led by Miss Ruth Wardall, Ohio State University.
11.00–12.00 a.m.[1] Dr. C. E. Marshall, professor of bacteriology and hygiene, Michigan Agricultural College: Biology of the Cell. The General Nature of the Cell and its Metabolism.
1.00–3.00 p.m. Bacteriology Laboratory. Chemistry Laboratory.
2.00–3.00 p.m.[1] Mr. C. J. Galpin, lecturer on country life, Department of Agricultural Economics, University of Wisconsin: What is a Rural Community? How to Study it by Means of a Survey.
3.00–5.00 p.m. Dr. Mendel: Seminar.

Tuesday, July 9.

8.00–9.00 a.m.[1] Dr. Mendel: Enzymes and Fermentations.
9.00–11.00 a.m. Miss Agnes Hunt, professor of domestic science, Michigan Agricultural College: Effects of Heat on Protein. Demonstration.
11.00–12.00 a.m.[1] Dr. W. G. Giltner, research assistant in bacteriology, Michigan Agricultural College: Biology of the Cell. The Toxins of the Cell.
1.00–3.00 p.m. Bacteriology Laboratory. Chemistry Laboratory.
2.00–3.00 p.m.[1] Mr. Galpin: Community Festivals as Agencies of Social Contact.

Wednesday, July 10.

8.00–9.00 a.m.[1] Dr. Mendel: Food Transportation within the Organism.
9.00–11.00 a.m. Prof. Hunt: Effects of Heat on Fats. Demonstration.
11.00–12.00 a.m.[1] Dr. Otto Rahn, assistant professor of bacteriology, Michigan Agricultural College: Biology of the Cell. Energy of the Cell.
1.00–3.00 p.m. Bacteriology Laboratory. Chemistry Laboratory.
2.00–3.00 p.m.[1] Dr. W. O. Hedrick, professor of history and economics, Michigan Agricultural College: Human Ecology—Environmental Conditions.
8.00–10.00 p.m.[1] Conference, led by Dr. J. M. Coulter.

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[1] Given in the Graduate School of Agriculture.

Thursday, July 11.

8.00–9.00 a.m.[1] Dr. Mendel: Newer Researches on Nutrition in Growth and Maintenance.
9.00–11.00 a.m. Prof. Hunt: Effects of Heat on Carbohydrates. Demonstration.
11.00–12.00 a.m.[1] Mr. C. W. Brown, research assistant in bacteriology, Michigan Agricultural College: Biology of the Cell. Enzymes of the Cell.
1.00–3.00 p.m. Bacteriology Laboratory. Chemistry Laboratory.
2.00–3.00 p.m. Dr. Hedrick: Human Responses.
3.00–5.00 p.m. Dr. Mendel: Seminar. Teaching of Dietetics and Hygiene in Dress.

Friday, July 12.

8.00–9.00 a.m.[1] Dr. Mendel: Synthesis in Nutrition.
9.00–10.00 a.m. Dr. Sophonisba P. Breckinridge, assistant professor of social economy, University of Chicago: The Spending of Money.
10.00–11.00 a.m. Dr. Breckinridge: Economic Coöperation of Women.
11.00–12.00 a.m.[1] Dr. F. H. Van Suchtelen, research assistant in Bacteriology, Michigan Agricultural College: Biology of the Cell. The Products of the Cell.
1.00–3.00 p.m. Bacteriology Laboratory. Chemistry Laboratory.
2.00–3.00 p.m.[1] Dr. Hedrick: The New Geography.
3.00–4.00 p.m. Dr. Breckinridge: Woman's Responsibility for the Condition of the Wage Earner.
4.00–5.00 p.m. Dr. Breckinridge: Standardization of the Care of Children.
8.00–10.00 p.m.[1] Conference: Agricultural Research, led by Dean H. L. Russell.

Monday, July 15.

8.00–9.00 a.m.[1] Dr. Oscar Riddle, research associate, Carnegie Institute, Chicago: Embryology and Evolution. The Two Aspects of Development.
9.30–10.30 a.m. Conference: Teaching of Textiles, led by Mrs. L. L. Peppard, Michigan Agricultural College.
1.00–3.00 p.m. Bacteriology Laboratory. Chemistry Laboratory.
3.00–5.00 p.m.[1] Dr. Riddle: Seminar.

Tuesday, July 16.

8.00–9.00 a.m.[1] Dr. Riddle: The Elementary Phenomena of Development.
9.30–10.30 a.m. Miss Minna C. Denton, assistant professor of bacteriology and sanitation, Lewis Institute, Chicago: Newer Aspects of Sanitation. Ventilation.
1.00–3.00 p.m. Bacteriology Laboratory. Chemistry Laboratory.

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[1] Given in the Graduate School of Agriculture.

Wednesday, July 17.

8.00–9.00 a.m.[1] Dr. Riddle: The Physiological Basis of Sex.
9.30–10.00 a.m. Prof. Denton: Relation of the Consumer to the Improvement of the Sanitary Quality of the Milk Supply.
1.00–3.00 p.m. Bacteriology Laboratory. Chemistry Laboratory.
8.00–10.00 p.m. Conference with the Graduate School of Agriculture, Extension Work, led by Mr. Tuck of Cornell University.

Thursday, July 18.

8.00–9.00 a.m.[1] Dr. Riddle: The Physiology of the Development of Color Characters (1).
9.30–10.30 a.m. Prof. Denton: Some Points in Sanitation.
11.00–12.00 a.m. Dr. C. F. Langworthy, Chief of Nutrition Investigations, U. S. Department of Agriculture: Respiration Calorimeters.
1.00–3.00 p.m. Bacteriology Laboratory. Chemistry Laboratory.
3.00–5.00 p.m. Conference: Extension Work, led by Miss L. A. Harkins, Montana Agricultural College.

Friday, July 19.

8.00–9.00 a.m.[1] Dr. Riddle: The Physiology of the Development of Color Characters (2).
9.30–10.30 a.m. Prof. Denton: Teaching of Sex Hygiene.
11.00–12.00 a.m. Dr. Langworthy: Evolution of Table Manners and Customs.
1.00–3.00 p.m. Bacteriology Laboratory. Chemistry Laboratory.
4.00–5.00 p.m. Mr. Michael Carmichael Carr, Theory and Practice of Art, University of Missouri: The Meaning of Dress.
8.00–10.00 p.m. Conference with the Graduate School of Agriculture, Agricultural Extension, led by Prof. G. I. Christie.

Saturday, July 20.

8.00–9.30 a.m. Mr. Carr: The Costume of the Future.

Monday, July 22.

8.00–9.00 a.m.[1] Dr. E. B. Forbes, chief of nutrition, Ohio Experiment Station: The Mineral Elements in Animal Nutrition. The Mineral Elements in Relation to General Physiology.
9.30–10.30 a.m.[1] Mr. R. M. Washburn, associate professor of dairy husbandry, University of Minnesota: Nutritive Value of Various Milks. Survey of the Field. Plan of the Experiments.
11.00–12.00 a.m. Conference: Courses of Instruction, led by Mrs. Alice P. Norton, University of Chicago.
1.00–3.00 p.m. Bacteriology Laboratory. Chemistry Laboratory.
3.00–5.00 p.m. Dr. Forbes: Seminar.

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[1] Given in the Graduate School of Agriculture.

Tuesday, July 23.

8.00–9.00 a.m.[1] Dr. Forbes: The Balance of Basic and Acid Compounds in Nutrition.
9.30–10.30 a.m.[1] Prof. Washburn: Fat vs. Lean Milk. A Study of Correctives.
11.00–12.00 a.m. Miss Grace Smith, Technical High School, Springfield, Mass.: Industrial History as Related to the Teaching of Textiles.
1.00–3.00 p.m. Bacteriology Laboratory. Chemistry Laboratory.
3.00–5.00 p.m.[1] Dr. Forbes: Seminar.
4.00–5.00 p.m. Dr. Edna D. Day, professor of Home Economics, University of Kansas: The Effect of Cooking on Vegetable Foods. Starch.

Wednesday, July 24.

8.00–9.00 a.m.[1] Dr. Forbes: Individual Elements and Their Compounds in Metabolism.
9.30–10.30 a.m.[1] Prof. Washburn: Holstein vs. Jersey Milk. Homogenized vs. Normal Milk.
11.00–12.00 a.m. Miss Smith: Early History of Textiles. Linen and Wool.
1.00–3.00 p.m. Bacteriology Laboratory. Chemistry Laboratory.
4.00–5.00 p.m. Prof. Agnes Hunt: Investigation for the Undergraduate.
8.00–10.00 p.m.[1] Conference: The Practicum Side of Secondary Instruction in Agriculture, led by Prof. W. H. French, Michigan State Agricultural College.

Thursday, July 25.

8.00–9.00 a.m.[1] Dr. Forbes: Practical Considerations.
9.30–10.30 a.m.[1] Prof. Washburn: Increasing Bone Strength. Conclusions and Commercial Considerations.
11.00–12.00 a.m. Miss Smith: The Industrial Revolution.
1.00–3.00 p.m. Bacteriology Laboratory. Chemistry Laboratory.
4.00–5.00 p.m. Dr. Day: The Effect of Cooking on Vegetables (cont.). Cellulose.
7.30–9.00 p.m.[1] Conference: Collegiate Instruction in Agriculture, led by Dr. True.

Friday, July 26.

8.00–9.00 a.m.[1] Dr. Forbes: Methods of Investigation and Interpretation of Results.
9.30–10.30 a.m.[1] Prof. Washburn: The Influence of Fat, Sugar, and Gelatine in Ice Cream.
11.00–12.00 a.m. Miss Smith: Cotton.
1.00–3.00 p.m. Bacteriology Laboratory. Chemistry Laboratory.
3.00–5.00 p.m.[1] Prof. Washburn: Seminar.

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[1] Given in the Graduate School of Agriculture.

NATIONAL EDUCATION ASSOCIATION.

At the fiftieth annual convention of the National Education Association, held in Chicago, July 6 to 12, the American Home Economics Association held one session, under the Department of Manual Training and Art, in the Fullerton Hall of the Art Institute. Miss Isabel Bevier of the University of Illinois, president of the American Home Economics Association, presided.

The topic of the afternoon was The Economics of the Household, with the following papers: Distribution of Income, $500, $1000, and $2000 per Year for the Family of Five, Mary S. Snow, supervisor of household arts in the public schools of Chicago; Dietetic Standards for these Various Households, Miss Bevier; and Obligations of Society toward the $500 Income, Mrs. Raymond Robins, head of the National Women's Trade Union League of Chicago.

A discussion of the papers was given by Miss Carrie H. Lyon, instructor in cooking and housekeeping, Margaret Morrison Carnegie School for Women, Pittsburgh, and Mrs Alice P. Norton, assistant professor of household administration, University of Chicago.

That the meeting was of great interest to those in attendance at the National Education Association was evinced by the crowded attendance, filling Fullerton Hall long before the meeting was called to order, and by the several hundreds who were turned away, also by the enthusiasm displayed at the conclusion of each paper.

Other papers that were of interest to those interested in Home Economics were as follows:

Topic: Rural Life Conditions and Rural Education.

1. A Social and Educational Survey of the Rural Community. Warren H. Wilson, director of missions, New York, N. Y.
2. What is Being Done to Meet the Problem:
   (*a*) By the Schools of Guilford County, North Carolina. T. R. Foust, county superintendent, Greensboro, N. C.
   (*b*) By the State of Oregon. L. R. Alderman, state superintendent of public instruction, Salem, Oregon.
   (*c*) In North Dakota. James H. Worst, president of State Agricultural College and director of Experiment Station, N. Dak.
3. The Humanity of Highways. Mary E. DeGarmo, director of country life department, National Congress of Mothers, St. Louis, Mo.

4. The School, the College, and the English Farmer. E. J. Russell, director of Rothamsted Experimental Station, Harpenden, England.
5. What the National Government Can Do. Philander P. Claxton, United States commissioner of education, Washington, D. C.

Gardening in the Light of Racial History. Le Roy H. Harvey, Western State Normal School, Kalamazoo, Mich.

The Training of Teachers for School Gardening. S. B. McCready, Ontario Agricultural College, Guelph, Canada.

Nature Study and the City Child. John L. Randall, supervisor of children's gardens, Pittsburgh, Pa.

A Garden for Every Child. Emilie Yunker, State Normal School, Louisville, Ky.

Discussion: Ada Van Stone Harris, assistant superintendent of schools, Richmond, Va.

School Gardens and the Fundamentals of Education. Otis W. Caldwell, professor in University of Chicago, Chicago, Ill.

Report of the Committee on Course of Study in Agriculture. E. C. Bishop, Schools Section, Extension Department, Iowa State College of Agriculture and Mechanic Arts, Ames, Iowa, chairman.

Discussion.

The Relation of Better Highways to Country Life Betterment. Mary E. De Garmo, Special Agent, United States Office of Public Roads, St. Louis, Mo.

Joint Session with the American Nature-Study Society and the School Garden Association of America.

Topic: School Gardens and Agricultural Experiment Plots for Rural Schools.

Rural School Gardens Differentiated from City School Gardens. Van Evrie Kilpatrick, president of School Garden Association of America, 4852 Broadway, New York, N. Y.

Rural School Gardens: Results in Ontario, Canada. S. B. McCready, Ontario Agricultural College, Guelph, Canada.

Home Garden and Experiment Plots. Elliott R. Downing, assistant professor in School of Education, University of Chicago, Chicago, Ill., secretary of American Nature-Study Society.

Forestry in Rural Schools. E. R. Jackson, United States Forest Service ,Washington, D. C.

Topic: Redirection of Rural Education.

The Work of the United States Bureau of Education. Philander P. Claxton, United States commissioner of education, Washington, D. C.

The Plans of the Special Committee of the National Education Association on Rural Education. E. T. Fairchild, state superintendent of public instruction, Topeka, Kans.

The Betterment of Rural Schools Through Agriculture: The Ohio Plan. F. W. Miller, state commissioner of education, Columbus, Ohio. . .

The Betterment of Rural Schools Through Boys' and Girls' Clubs: The Nebraska Plan. James E. Delzell, state superintendent of public instruction, Lincoln, Nebr.

The Work of the National Committee on Agriculture. Homer H. Seerley, president of Iowa State Teachers College, Cedar Falls, Iowa, chairman.

Topic: The Relation of the Public Schools to the Movement for Recreational, Social and Civic Opportunity.

1. The Schoolhouse as a Social and Civic Center. Frank P. Walsh, Kansas City, Mo.

2. How a Community May Find Out and Plan for its Recreational Needs. Rowland Haynes, field representative, Playground and Recreation Association of America, Minneapolis, Minn.

3. The Relation of Schoolhouse Architecture to the Social Center Movement. Dwight H. Perkins, Chicago, Ill.

4. The Public Library, the Public School, and the Social Center Movement. Arthur E. Bostwick, Librarian, Public Library, St. Louis, Mo.

5. The Organization and Administration of Recreation and Social Center Work. Erich C. Stern, member of State Legislature, Milwaukee, Wis.

6. The School as a Recreation Center. Jane Addams, head resident, Hull House, Chicago, Ill.

7. The Social Center and the Rural Community. Herbert Quick, Editor of *Farm and Fireside*, Springfield, Ohio.

Citizen Coöperation. William H. Allen, director of Bureau of Municipal Research, New York, N. Y.

Civic and Social Center Development. Edward J. Ward, University of Wisconsin, Madison, Wis.

Discussion: Azile B. Reynolds, principal of Kinzie School, Chicago, Ill.; Pauline F. Witherspoon, director of social centers, Louisville, Ky.

The Significance of the Industrial Arts in the Schools. Charles Alexander McMurry, director of Normal Training School, DeKalb, Ill.

Sociological Phases of Industrial Education. Frank M. Leavitt, associate professor of industrial education, University of Chicago, Chicago, Ill.

Discussion: William J. Bogan, principal of Lane Technical High School, Chicago, Ill.; Charles H. Bailey, director of manual training, State Teachers College, Cedar Falls, Iowa; David Snedden, commissioner of education, Boston, Mass.

The Place of Art in the High School of Commerce. J. Earl Griffith, Central Commercial and Manual Training High School, Newark, N. J.

The Value of Art in the Industrial School. Walter Sargent, professor of aesthetic and industrial education, University of Chicago, Chicago, Ill.

The Dresden Congress. Florence E. Ellis, supervisor of drawing, Cleveland, Ohio.

Discussion: Rose Fetterof, state supervisor of art instruction, Harrisburg, Pa.

Vocational Training Old and New. T. Vernette Morse, president of Artcraft Institute Guild, Chicago, Ill.

The Needed Changes in Manual Arts. Fred D. Crawshaw, professor of manual arts, University of Wisconsin, Madison, Wis.

Is the Introduction of Technical Subjects in the Eighth Grade Advisable? Wilson H. Henderson, supervisor of manual training, Springfield, Ill.

Discussion: E. A. Wreidt, fellow in education, University of Chicago, Chicago, Ill.; Robert W. Selvidge, professor of manual arts, Teachers College, University of Missouri, Columbia, Mo.; L. L. Summers, director of manual training in State Normal School, Oshkosh, Wis.; L. W. Wahlstrom, Francis W. Parker School, Chicago, Ill.

Topic: Science in Practical Courses.

1. Communal Chemistry: How May the Teaching of Chemistry Promote the Well-Being of the Community? Lewis B. Allyn, State Normal School, Westfield, Mass.

2. Chemistry and Household Science. J. F. Snell, MacDonald College, Ste. Anne de Bellevue, Quebec, Canada.

3. Applied Botany. George A. Works, student in agricultural education, University of Wisconsin, Madison, Wis.

4. Physics and the Equipment Problem. J. A. Randall, Pratt Institute, Brooklyn, N. Y.

JOINT SESSION WITH THE DEPARTMENT OF PHYSICAL EDUCATION.

Sexual Reproduction in Animals: The Purpose and Methods of Teaching It. Mary Putnam Blount, instructor in zoology, University High School, Chicago, Ill.

The Physical Growth of the Child and Its Hygiene. W. A. Evans, M.D., Northwestern University, Evanston, Ill.

The Selection of Physical Activities as Determined by the Laws of Growth. William H. Burnham, professor of pedagogy and school hygiene, Clark University, Worcester, Mass.

DEPARTMENT OF CHILD HYGIENE.

President's Address: The Contribution of Hygiene to Education. William H. Burnham, professor of pedagogy and school hygiene, Clark University, Worcester, Mass.

The Hygiene of Rural Schools. Fletcher B. Dresslar, specialist in school hygiene, United States Bureau of Education, Washington, D. C.

Child Hygiene in the Primary Grades. Arnold L. Gesell, assistant professor of education, Yale University, New Haven, Conn.

DEPARTMENT OF SCIENCE INSTRUCTION.

President's Address, David Starr Jordan, president of Leland Stanford Junior University, Stanford University, Cal.

Eugenics. William A. McKeever, State Agricultural College, Manhattan, Kans.

Scientific Study of the Psychology and Physiology of Adolescence:

(*a*) A Study in Adolescent Efficiency. J. H. McCurdy, director of physical department, International Y. M. C. A. Training College, Springfield, Mass.

(*b*) A Psychological Classification of High School Boys. George E. Dawson, director of department of child study, Henry Barnard School, Hartford, Conn.

Topic: The Public Schools and the Public Health.

1. The Duty of the State in the Medical Inspection of Schools; Results which the Public may Rightfully Expect. Fletcher B. Dresslar.

2. The Teaching of Hygiene in the Schools: Public, Personal. David Starr Jordan, president of Leland Stanford Junior University, Stanford University, Cal.

3. Sanitation in the Rural Community. Charles E. North, M.D., New York, N. Y.

4. Medical Inspection and Medical Freedom. Charles A. L. Reed, M.D., Cincinnati, Ohio.

5. Some Problems in Education, as Related to the Public Health. Harvey W. Wiley, contributing editor and director of bureau of foods and health, *Good Housekeeping Magazine*, Washington, D. C.

Educational Values of the School Yard, or Playground. E. B. De Grott, superintendent of playgrounds and sports, South Park Commission, Chicago, Ill.

Discussion.

Facilities for Industrial Training. Charles A. Prosser, secretary of Society for the Promotion of Industrial Education, New York, N. Y.

Continuation Schools. Edwin G. Cooley, Chicago, Ill.

Discussion.

(*a*) The High School Course in General Science. V. G. Barnes, High School, Madison, Wis.

Discussion: Ada L. Weckel, Oak Park and River Forest Township High School, Oak Park, Ill.

(*b*) Method in the General Science Course. John G. Coulter, Bloomington, Ill.

Discussion: W. L. Eikenberry, University High School, Chicago, Ill.

EDITORIALS.

The Summer Meetings.

The American Home Economics Association has rendered nation-wide service during the past summer, by the meetings held under its auspices at Lake Placid, Chicago, and East Lansing, which are reported elsewhere in this issue.

The Lake Placid meeting brought together a group of persons concerned with the teaching of household and institution administration or with service in these fields. One of the noteworthy features was the presence of a number of experts in scientific management, municipal problems, and the organization of labor, who made invaluable contributions to the program. The gathering primarily emphasizes the fact that household management, whether domestic or institutional, is being professionalized. The statement that the household is a business undertaking expresses, of course, only a part truth. It is of profound significance for the personal life of the home, however, that the business of the home is to be approached, in the future, in business terms, with the same standards of efficiency and economy that are being upheld in other fields.

The Home Economics papers at the meeting of the National Education Association at Chicago struck the home note in a program otherwise largely scholastic, and were especially well chosen in their bearing upon the timely topics of standards of living and cost of living. Home Economics, it was seen, is an essential element in national prosperity and welfare. The next meeting of the National Education Association, it was recommended by this convention, will be held in Salt Lake City next summer. If this plan is carried out it will provide opportunity for a much needed Home Economics meeting in the West.

The Graduate School at East Lansing was the most successful ever held. It more than justified the plan of bringing together every other year those teachers in Home Economics who find it possible to meet and consider the advances in subject matter and methods of teaching in this new field of instruction. Workers in this field do well to remember that their work is not yet finished and that their instruction must be constantly improving. Some one has raised the

question whether future meetings of the school might not be held in connection with the regular summer sessions of different universities where credit might be given for courses taken.

In these meetings of the summer the Association has done a large service for the progress of Home Economics. Credit belongs to each member of the Association who by membership dues furnishes means for such activities.

Reports of the Summer Meetings.

In this number, programs and brief summaries are printed of the summer meetings of the American Home Economics Association, as well as several papers presented at the Administration Section held at Lake Placid. Other papers presented at the Lake Placid meetings and the discussion which the papers brought out will appear in the December number.

For the benefit of those particularly interested in the work of this Section, it is proposed to reprint the papers and discussion in a pamphlet which will be sold in the same way as other reprints of material which has appeared in the JOURNAL. It is believed that this plan will meet the needs of members and will be a convenience for librarians and others who are interested in the collection of literature bearing upon the subject of institution management.

Technical Opportunities in Home Economics.

As was natural, teaching was the first professional field open to Home Economics students. In the last few years, however, a wide range of positions, institutional, municipal, and industrial, has come to be recognized in which the subject matter of Home Economics finds application in practical ways. As food economics and dietetics are the divisions of household science most fully developed, so these fields have first found practical application. Such positions as institutional dietitian, visiting dietitian, lunchroom manager, purveyor, or institutional buyer, are definitely recognized as positions of dignity which command compensation as good as that for teaching. Domestic art finds its commercial applications similarly in the professions of interior decoration, costume design, professional shopping, dressmaking, and millinery. The costume designer, for example, may find employment with a newspaper or magazine, or may take a position as a designer in a tailoring estab-

lishment, while educational positions in this field are open to those who prefer teaching.

Other specialized positions are being recognized. The supervisor of a large institutional laundry is a responsible position, commanding in one case a $1200 salary with home. Some adventurous women have even experimented with the management of a commercial laundry, though, with one well-known exception, these have all been conducted on a small scale. The manager of a lunch room in a commercial establishment, a bank, a department store, has a field of work full of interesting possibilities and of great responsibility.

The time was not long ago when young women turned to teaching as the one profession open to them. Now vocational opportunities are opening on every hand. The volume on Vocations for Women Other than Teaching, published by the Women's Educational and Industrial Union of Boston, offers guide posts in these new fields. It should be in every Home Economics library. Our college departments and technical institutes are spying out the possibilities of vocations relating to Home Economics, and students who are contemplating a Home Economics course have already a wide choice in fields other than teaching.

The question of compensation in these new fields is always an important one to the inquirer. In general it may be said that salaries tend to be at least equal to teachers' salaries, with this important qualification: The business and commercial world ever recognizes initiative and the power of assuming responsibility by increased compensation. The person in a managing position controls the purse strings, and is able to effect savings and economies; the compensation of such a person is limited only by the value of that indefinite but infinitely useful qualification, executive ability.

Our institutions are not likely to over-emphasize the opportunities in these new non-teaching fields. Because of them, the individual student has now a wider range of choice and should be able better to choose work in accordance with personal qualifications. Educational work also will profit indirectly by these newer developments, and a better adjustment of persons and positions all the way around is effected.

Research and Home Economics.

A discussion in a recent number of the *Experiment Station Record* of the need and the opportunity for research work in Home Economics is so much to the point that it seems well to direct the attention of readers of the JOURNAL to much that was there said.

One of the significant educational developments of recent years has been the increasing recognition accorded to instruction in Home Economics. Although the term itself was unfamiliar a generation ago, at the present time Home Economics courses are being offered in this country in more than twelve hundred institutions, of which over two hundred are colleges and normal schools. Extension work has likewise been well organized in many of the States, largely with a view to reaching the women on the farm, although the need for work for the benefit of city and town housekeepers has not been, by any means, lost sight of. In short, Home Economics instruction is already emerging from the pioneer stage and becoming an accepted factor in American education.

One of the principal obstacles which educators are encountering in their efforts to reduce the subject to sound pedagogical form is the comparatively retarded development of experimental work. It is well recognized that, as is the case with other composite branches of learning, Home Economics is largely a specific application of the principles of chemistry, bacteriology, physics, and other subjects; but, as is also the case with agriculture and other composite subjects, there are required to make it most effective special investigations and experiments, made from the standpoint of those who appreciate the needs and use to be made of such information.

Considering Home Economics as including the economic, scientific, and esthetic aspects of food, clothing, and shelter as connected with their selection, preparation, and use by the family in the home or by other groups of people, it is a matter of everyday knowledge that many of its practical applications are still largely governed by rule-of-thumb or by tradition. For example, the laws of heat are well understood in the scientific world, but their application to cookery, to food preservation, or to the heating of houses needs far more investigation that it has thus far received.

The present is preëminently the era of machinery, but the improvement of household appliances has been left almost entirely to commercial exploitation, and progress has admittedly lagged far behind

achievements in the factory and on the farm. Yet it is surely true that if there are to be reliable comparisons of the merits of different foods or textiles, or of different labor-saving or sanitary devices, there must be scientific tests by those familiar with the housekeeper's needs and competent to work out her problems.

It is even more important now than it was a few years ago that there should be a sound scientific basis for instruction on how food materials can be best utilized in family diets, how houses should be constructed, furnished, and managed, and what materials are most suited for clothing, because of late years there has been less and less opportunity to acquire experience in such matters in the home itself. Two or three generations ago each home, and especially each rural home, was practically self-sufficient, producing not only its own food supply, but, to a large extent, its own clothing, and constructing its buildings in such a simple way that any intelligent and experienced laborer could understand the principles involved. Now, however, a great many branches of work which were formerly home industries have been taken over by factories or by specialized workers, and there is no longer the opportunity to learn about them by practical trials in the home. In many cases such knowledge as is available is still, to a certain extent, handed down in an empirical way from mother to daughter, but in many others it would soon die out entirely did not schools or other educational agencies supply it, and these must acquire exact knowledge before they can transmit it.

It is true that many of the problems encountered are more or less isolated in application, and that much can be accomplished by individual initiative within the home and many housekeepers do solve their special problems. But it is as unreasonable to look to the housekeeper for progress along technical lines, which yield general results obtained under contrasted conditions, as to expect the farmer to work out the fundamental principles of his art.

Just as the trained experimenter was needed for the conversion of agriculture from a traditional to a scientific basis, so all that relates to hygiene and household methods and to the host of related questions demands careful study by experts having proper equipment for the undertaking.

Fortunately the dependence of Home Economics instruction upon research is becoming generally recognized and the belief that housekeeping is largely a matter of inspiration and feminine intuition,

with no accumulated store of information to draw upon, is rapidly giving way to the modern view that "a knowledge of housekeeping is not a matter of sex but of science."

During the last twenty or thirty years much attention to research by laboratory methods in problems affecting the home has been given, to some extent by Home Economics workers themselves and even more largely by scientists in associated lines. Agriculture in particular has contributed most valuable assistance, the community of interests between the production of food supplies, textiles, and other farm products and their utilization within the home being generally recognized.

Most of the agricultural experiment stations have from time to time studied problems which have to do with the handling, storing, and marketing of foods, while many have had to deal with food and drug inspection. They have also studied many technical as well as practical problems of milling and dairying, and other problems which pertain to the home as distinguished from the farm as an industrial enterprise. Of such work may be mentioned studies of the composition and digestibility of foods, numerous studies of cooking processes and of canning, dietary studies, the improvement in quality of cotton, flax, and wool, studies of household equipment and conveniences, and the cost of board for laborers on farms.

An important service has also been rendered by the engineering experiment stations established at several of the agricultural or "land grant" colleges. Comparisons of different illuminants and fuels, and studies of sewage disposal plants and of building materials, may be cited as types of the work already undertaken.

It is well known that the U. S. Department of Agriculture has made a large number of contributions to Home Economics, the nutrition investigations of the Office of Experiment Stations and the activities of nearly every bureau containing much of interest. The work on food adulteration of the Bureau of Chemistry, the studies of household insect pests of the Bureau of Entomology, and the studies of the cost of home labor of the Bureau of Statistics are examples of this interest in home problems.

The contributions of Home Economics workers themselves have been numerous and meritorious, especially in view of the comparative newness of the subject and the lack of organized research agencies. The attention which is being concentrated on the preparation of research workers is yielding results of much promise, and the list

of additions to knowledge in the form of theses for advanced degrees is each year becoming more important.

Contributions from the more mature workers actively engaged in instruction duties are even yet relatively few. This of course is unfortunate since their qualifications and experience would seem to promise results of exceptional value. But when one recalls the demands made on an instructor's time by classroom work, by the necessity for preparing outlines and text books, by the extension work many of them do, and by other necessary activities, it is obvious that not much time remains for research.

Notwithstanding these difficulties, to which may be added those imposed by an absence of funds for research and often of equipment, the uncertainties as to the publication of results, and the lack of many other advantages enjoyed by a regularly organized research institution, it is believed that there are many opportunities for adding to the store of knowledge by the use of existing facilities. For instance much can be accomplished by coöperation with other departments, for example bacteriology, chemistry, or engineering. This has been proved by a number of recent instances of such coöperative work.

The responsibility for real progress in research, however, must rest largely with the Home Economics departments. Whatever the assistance rendered by other agencies, the upbuilding of a distinctive body of Home Economics knowledge must come mainly from investigations by the Home Economics workers themselves, rather than through the mere adaptations of either traditional methods or "borrowed science." It is well known that this has already been the experience in agriculture, and the close analogy between the two studies warrants the prediction that the future of Home Economics instruction depends very largely upon its establishment on a sound scientific foundation by those to whom its development has been specifically intrusted.

Doubtless in many cases the undertaking of comprehensive investigations by Home Economics instructors is impracticable under present conditions, but as in the early days of agricultural instruction, there are a host of smaller projects awaiting and needing solution for which opportunity might be found. For instance, in the field of textiles, there may be cited studies of the relative durability of different fabrics as affected by such controllable conditions as the kind of material, its thickness, and its closeness of weave; the permeability

of textiles and other materials to air; the testing of various solvents in removing stains from fabrics; and the comparison of soaps and detergents in different waters and temperatures. There might well be additional studies of the comparative cost of household fuels and of illuminants, of the use of nonconducting materials in stoves and other cooking appliances and utensils, and of the solubility of kitchenware in different waters, fruit acids, and other liquids. The physics of cookery offers a great opportunity, for instance in the study of the relation of the specific gravity of foods to quality. The perfecting of systems of household accounting and the investigation of the lessening of the time requirements of household operations, the actual loss incurred by the purchase of supplies in uneconomical quantities, and the incomplete utilization of "left overs," are other examples, such as will readily suggest themselves to the thoughtful observer. Some of these studies require time rather than special apparatus and might readily be carried through during the long summer vacation, and others demand regular attention and laboratory facilities rather than large amounts of time.

In many of these cases not the least of the benefits to be secured would be the stimulation of the research spirit of the teacher, for the generally accepted opinion of President Jordan of Leland Stanford University that "no one can be a great teacher without the spirit of research; without this he lags behind the progress of knowledge and his mental equipment becomes second hand," is as applicable to Home Economics as to other subjects of instruction. There is also the same broadening and stimulating effect on advanced students in Home Economics as on those in other lines.

The increasing attention which is being devoted to the more thorough training of prospective teachers in research methods is a recent development which augurs well for the future. The steadily improving facilities for graduate study, and the numerous summer schools now available are destined to add greatly to the ultimate efficiency of Home Economics instruction and experimentation. Once the inculcation of the spirit of research into the investigators of to-morrow can be accomplished, the establishment of Home Economics as a well-defined science will be assured, and its consistent development may be confidently awaited.

Richards Memorial Fund.

With the returning of teachers and workers from vacations, the canvass for the Ellen H. Richards Home Economics Memorial Fund will be pushed forward vigorously. We hear of many schools and colleges which have already raised sums of money, often by coöperative effort through a committee of students, a candy-sale, an entertainment, or some other method. Other institutions are planning to carry out such efforts this fall. The publication of the Life of Ellen H. Richards by Caroline L. Hunt, extended notice of which will be given in a later issue, will greatly aid in the canvass. The Memorial fund is meantime going forward.

FUTURE MEETINGS OF THE ASSOCIATION.

A meeting of members of the Executive Committee of the American Home Economics Association was held at the Auditorium Hotel, Chicago, June 27, 1912, and action was taken (since ratified by members of the committee not present) as follows, regarding the coming meetings of the Association:

It was decided to try the experiment of a summer meeting of the entire Association, and to this end it was voted to accept the invitation of Cornell University to hold such a meeting at Ithaca, N. Y., at the end of June, 1913. This meeting, it is planned, will include all sections of the Association, with a general program and the sectional programs of the Administration Section and Housekeepers' Committee. It is desired especially to make the meeting one national in character.

It was further voted to accept the invitation of Simmons College, Boston, for a meeting in that city in connection with the meetings of the American Economic Association and the American Sociological Association during the Christmas holidays, 1912; and the New England Home Economics Association has been asked to coöperate in the arrangements. It was voted that this should be a one-day meeting (December 31) and that the Committee on Nominations should be asked to report at this meeting the results of an election of officers for 1913 to be held by mail preceding the meeting.

The Housekeepers Committee announces that a conference will be held under its auspices at Chicago, November 20, 1912, to consider problems connected with the management of the private home. Information can be secured from Mrs. Lyndon Evans, chairman, 1240 Astor Street, Chicago, Ill.

BENJAMIN R. ANDREWS,
Secretary, American Home Economics Association.

NEWS FROM THE FIELD.

International Congress of Farm Women.

The Second International Congress of Farm Women will meet in connection with the Dry Farming Congress at Lethbridge, Alberta, Canada, October 22 to 25, 1912. The official call for the congress has been sent to the chief executives of nations, governors of states, secretaries or ministers of agriculture, presidents and officers of universities and colleges where agriculture is taught, national, state, or local organizations having for their object the enlargement of agricultural education and the uplift of home life upon the farm, editors of magazines and of other literature devoted to better homes and rural life, women on the farm, and others interested.

The congress is working for organized effort at rural community building, beautifying and brightening of homes, more frequent opportunities for social intercourse, better education of children, lightening of toil in the home, and the raising of neighborhood standards, mentally, physically, morally, and socially.

Among the speakers will be Miss Alice Ravenhill of Vancouver, late of England; Prof. George A. Putnam of Toronto, a leader in women's institute work in Canada, who will give the report of the Ontario Women's Institutes; Mrs. Jennie Muldrew, in charge of the Alberta Ladies' College at Red Deer, Alberta, whose subject will be Modern Education of Women; Mrs. Marie Turner Harvey, in charge of the consolidated school at Kirksville, Mo., conducted under state auspices, and one of the leading advocates of the consolidated school system, who will speak on consolidated schools; Dr. Warren H. Wilson of New York, one of the speakers at the first International Congress of Farm Women at Colorado Springs, who will deliver an address on The Rural Church and Its Possibilities as a Center for Community Progress, Amusement, etc., and Miss Irma E. Mathews, superintendent of women's institutes of the Woman's Institute of the State Board of Agriculture of Oklahoma, who will give an illustrated talk on Farm Homes of Our Country.

During the meeting it is planned to have a farm women's session where talks along practical lines by farm women will be given. Mrs. John A. Widtsoe of Logan, Utah, and Dr. Liberty H. Bailey of Cornell University, Ithaca, N. Y., will address the congress.

The objects of the congress are to improve the conditions—financial, physical, social, and spiritual—of agricultural homes, and to encourage greater state and national support for institute and extension work among farm women. It aims to understand more completely the significance of the farm to the life of the nations, and the dignity of the position of the farm woman as co-worker in the most potential and far-reaching of the national industries, to increase conservation of energy through intercourse and observation of processes, to understand modern appliances and education in the scientific management of work, to further develop the home through conference with authoritative experts on dairy methods, poultry culture, kitchen gardening, modern home equipment, problems of nutrition, chil-

dren's welfare, industrial education including Home Economics, increase and proper use of leisure, and the stimulation of social intercourse in rural communities.

The officers of the congress are as follows: President, Mrs. Byrtha L. Stavert, Editor *Country Life in Canada*, Winnipeg, Man.; vice-presidents, Miss Irma Mathews, superintendent of Women's Institute, Oklahoma City, Okla.; Mrs. Clark W. Kelley, Devil's Lake, N. D., and Mrs. John A. Widtsoe, Logan, Utah; secretary-treasurer, Mrs. John T. Burns, Lethbridge, Alberta.

During the Congress there will be held an exhibition of labor-saving devices for the farm home, and a demonstration of sanitary and hygienic devices, in connection with which lectures will be given.

Eighth International Congress of Applied Chemistry.

The opening meeting of this congress was held in Washington, September 4, and the other meetings, both business and scientific, in New York City, September 6 to 13.

The President of the United States was patron of the congress, and the officers were as follows: Honorary president, Dr. Edward W. Morley; president, Dr. William H. Nichols; secretary, Bernhard C. Hesse.

In addition to the formal opening session of the congress at Continental Hall, September 4, the Washington meeting included numerous social features. Although President Taft found it impossible to be present at the opening session, as had been his intention, he received the members at the White House, and made a brief address. There was also a reception for the members of the congress given by the regent and secretary of the Smithsonian Institution at the new building of the National Museum.

At the opening meeting, the address of welcome was delivered by Dr. William H. Nichols, president of the congress. Responses were made by foreign delegates, including Prof. Dr. Rudolph Wegschneider, for Austria; Prof. L. Lindet, for France; Prof. Dr. von Buchka, for Germany; Sir William Ramsay, for Great Britain; Dr. Jokichiro Lemori, for Japan; Commanditore Giacome Ciamician, for Italy; Prof. P. Walden, for Russia; Prof. A. Stutzer, for Switzerland; and Dr. Samuel Eyde, of Norway, for other countries.

As was the case at the seventh international congress at London in 1909, the program of the meetings of the various sections included much that is of interest to students of Home Economics. As instances may be cited the following: The industry and chemistry of sugar, starch, cellulose, and paper—their chemistry and other features, including flour, bread making, baking powder, paper testing, etc.; the composition of food, metabolism, dietetics, cleanliness in food manufacture; cooking utensils—their manufacture and effect on the composition of food, and related topics; water, soil, sewage, and other questions of hygiene; fats, fatty oils, and soaps; paints, drying oils, and varnishes; combustibles—fuels and illuminants, including the question of energy in relation to these matters; conservation of water for domestic use, and other related topics; India rubber and other plastics; and coal tar dyes, colors, and dyestuffs; as well as matters pertaining to analytical chemistry, and other general and special topics.

The full report was printed in advance, and distributed to the members, as were also separates of many of the papers.

International Congress of Hygiene and Demography.

The International Congress on Hygiene and Demography has just held its fifteenth meeting at Washington, D. C., from September 23 to 28. In connection with the congress a very successful exhibition on health was held, at which the hygienic and demographic work of the United States and its dependencies was illustrated. The congress was organized in two divisions—a division of hygiene in eight sections, and a division of demography, as the ninth section. The topics for the sections were as follows: Hygienic microbiology and parasitology; dietetic hygiene, hygienic physiology; hygiene of infancy and childhood, school hygiene; hygiene of occupations; control of infectious diseases; state and municipal hygiene; hygiene of traffic and transportation; military, naval, and tropical (colonial) hygiene; demography. The Department of State assumed the responsibility of the conduct of the congress, and appointed for the purpose of its organization as president, Dr. Henry P. Walcott, of Massachusetts, and as secretary-general, Dr. John S. Fulton of Maryland.

President Taft was honorary president of the Congress and delivered an address of welcome at the opening session, Monday morning, September 23. Later he received the delegates at the White House.

The public addresses and the section meetings were of unusual interest and value. Much was presented of interest to students of Home Economics, particularly in the section of dietetic hygiene and other sections.

An address of special interest was that by Geheimrat Professor Dr. Max Rubner, President of the Permanent Industrial Commission of the Congresses on Hygiene and Demography, who spoke on Dietetics for the People (Volks Ernährung).

Home Economics at the General Federation of Women's Clubs.

At the eleventh biennial convention of the General Federation of Women's Clubs, held in San Francisco, June 25 to July 5, one session and a conference were devoted to the Household Economics Section, of which Mrs. Olaf N. Guldlin of Indiana is chairman. The program of the meeting was as follows: Mrs. Nash, ex-president Iowa Federation, presiding; Our Problems in Civilization, Mrs. Guldlin; Some Suggested Solutions—Better Dress Standards, Mrs. John C. Hessler, Ill.; Democracy in the Home, Mrs. W. E. Miller, Ind.; Greetings from California, Miss Ednah A. Rich, Calif.; The Dawn of Tomorrow, Mrs. Olaf N. Guldlin. The subjects for discussion at the conference were these: Home Economics Extension Work—Through Our Colleges, leader, Miss Rich; Through Our Clubs, leader, Mrs. Florence Martin, Louisville, Ky.; Our Most Vital Needs, Mrs. Harriet Pancoast, Palmyra, N. J., and Mrs. Chas. Ott, Waverly, N. Y.; Box Furniture, Miss Louise Brigham, New York City; Household Decoration, Mrs. Hessler.

Concord State Normal School.

This School, of Athens, W. Va., of which Mr. C. L. Bemis is principal, will open this fall a new department of agriculture and one of Home Economics. Miss Sadie Bryson of the University of Minnesota will have charge of the Home Economics work.

The American Association for the Study and Prevention of Infant Mortality.

The American Association for the Study and Prevention of Infant Mortality held its third annual meeting in Cleveland, October 2 to 5. The provisional program gives the following committees, with a series of papers under each committee: Birth registration; educational prevention of infant mortality: continuation schools of home making, eugenics, housing in relation to infant mortality, midwifery, nursing, and social work; prevention of municipal mortality, and progress in preventive work. Among the speakers were Dr. Jacques Bertillon, Chief of the Bureau of Municipal Statistics Paris, France. The Association had a striking exhibit at the recent International Congress on Hygiene and Demography.

Michigan Home Economics Association.

This association held its second annual session at the Michigan State Agricultural College the last of May. The president of the State Federation of Women's Clubs, Mrs. Lucy White Williams, was one of the special guests of the day, and the Federation department of Home Economics was represented by Mrs. H. G. Thornton. Luncheon was served at noon in the Women's Building, giving opportunity for a social hour. At the regular meeting in the afternoon an address on Beauty in Common Things was given by Miss Mary S. Snow, supervisor of household arts in the Chicago public schools. The efficiency of the officers was recognized by their unanimous reëlection for the coming year. Miss Grace E. Fuller of the Ypsilanti State Normal College is president and Miss Lenna F. Cooper, of the Battle Creek Sanitarium, is secretary-treasurer.

Scranton Home Economics Association.

The Home Economics Association of Scranton, Pa., held a reception in July for the students of Home Economics in Scranton for the summer and for the playground workers. Miss Gwendolyn Stewart, president of the Association, made the address, in which she pointed out the close relationship existing between the home and the playground. Realizing this relation, the Scranton Home Economics Association, during the past summer, has held classes in cooking for girls between eleven and fourteen years of age. In this work the Association has had the help of the Y. W. C. A. and of the Playground Association. Miss Adele Grant, a recent graduate of the Boston Y. W. C. A. School of Domestic Science, taught the classes.

The School of Domestic Science of the Chautauqua Summer Schools.

During the past summer this school gave courses in home cookery, advanced cookery, food and dietetics, and domestic art, and Miss Anna Barrows of Teachers College, New York City, gave demonstrations in cookery. The faculty of the school was as follows: Director, Miss Barrows; Assistants, domestic science, Miss Effie J. Race, of the faculty of the School of the Deaf, Jacksonville, Ill.; Miss Lilla P. Frich, Minneapolis, Minn.; Miss Susannah H. Usher, of the University of Illinois; Miss Clara M. Parker, Iowa State College, and Miss Alice M. Thomas, of the Pittsburgh Public Schools; Domestic arts, Miss Laura M. Duntz, of the dressmaking department of Mechanics Institute, Rochester, N. Y., and Miss Gertrude Duntz, domestic art director, Buffalo, N. Y.

Bureau of Household Research.

A Bureau of Household Research was opened in Philadelphia, September 1, under the auspices of John B. Leeds, M.A., professor of household economics at Temple University.

The purpose of the bureau is to secure recognition for housework as a distinct and worthy profession. The attempt will be made both to assist housekeepers to plan and carry on systematically the work of the household and to aid young women who wish to work their way through college. Housekeepers who register with the bureau will take a course at Temple University in Household Economics and will be entitled to the services of the bureau both in the way of advice and suggestion regarding their household problems and in securing the assistance of student workers. Students who register with the bureau will give one-half of their time daily to study and recitation at Temple University and the other half to housework. Housekeepers may have one student assisting one day in the week up to four students every day. Students will be given an opportunity either to work in all lines of general housework or to specialize in cooking, sewing, laundry, nursing, care of children, etc. Work will be paid for by the hour according to the proficiency of the student worker.

Students must be graduates of a high school or have done equivalent work in order to register with the bureau. Those taking courses in kindergarten and primary school education at Temple may register with the bureau for practice in the care of children.

Students will live at their own homes or at a club-house adjacent. All arrangements between housekeepers and student houseworkers will be made by the secretary of the bureau, 1831 North Broad Street, Philadelphia. Arrangements are also being made for students who wish to work in institutions, apartment houses, hotels, etc.

Careful records are to be kept as data of value in scientific researches by the bureau in the standardization of household work.

Mechanics Institute Summer Session.

Mechanics Institute of Rochester, N. Y., held its first summer session from June 24 to August 16. Courses in manual training, domestic science, applied art, domestic art, pedagogy, and academic branches were offered. In domestic science elementary, intermediate, and advanced, and general cookery, under Miss Bessie Gillard, Miss Elizabeth C. Van Horne, and Miss May Gillard were given. Classes in elementary and trade dressmaking, elementary, advanced, and trade millinery, elementary and advanced sewing, and shirtwaist making were given in the domestic art department by Miss Theresa Coleman.